

Vol. 50

IULY 2, 1936

No. 18

Eliminate Blackened Yarn

with

NON-FUDO OIL
IN U.S. PAT. OFFICE& FOREIGN COUNTRIES

and lubricate spinning frames at less cost.

NON-FLUID OIL does not creep from roll necks to spread out on the face of top rolls. Thus it eliminates blackened yarn and prevents oil rot of roll covers.

For the same reason NON-FLUID OIL outlasts liquid oil 3 to 5 times—saving on cost of oil and application.

Let us prove our claims - - with free testing sample!

NEW YORK & NEW JERSEY LUBRICANT CO.

292 MADISON AVENUE

NEW YORK

Works: NEWARK, N. J.

Southern District Manager: L. W. THOMASON, Charlotte, N. C.

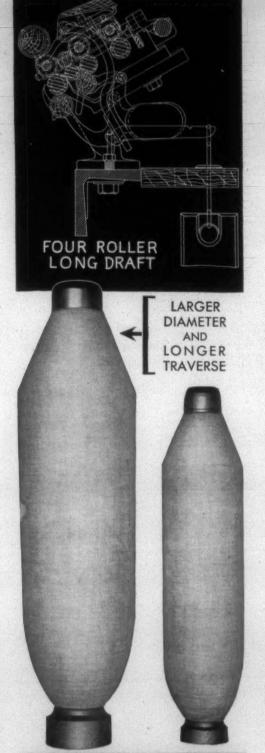
WAREHOUSES:

Charlotte, N. C. Providence, R. I.

Spartanburg, S. C. Detroit, Mich.

Greenville, S. C. Chicago, Ill.

Atlanta, Ga. St. Louis, Mo.



3 FEATURES that make MODEL B the last word in SPINNING ECONOMY

THE H&B MODEL B Spinning Frame, equipped with Four Roller Long Draft, Extra Large Rings, and Extra Long Traverse, is the last word in modern, low cost spinning. The large package reduces doffing costs to a minimum while the four roller long draft reduces card room costs.

The H & B Four Roller System of Long Draft makes a better yarn. This system allows for the natural positioning of the fibres. The bite of the second roll is not carried so near to the front roll as are the belts in other systems, so that "plucking" is prevented. Also the longer fibres are drafted to form the core of the yarn, where they have less tendency to break up into shorter fibres.

Year after year continuous running is maintained the same as in regular spinning. This machine is equipped with traversing Thread Board, Extra Duty Spindles and High Speed Rings.

The Model B Frame is now being installed in mills where cost studies have shown it to be the answer to present day spinning problems. Let us demonstrate that it can be successfully applied to your problems.

H & B AMERICAN MACHINE COMPANY

Cotton Preparatory and Spinning Machinery PAWTUCKET, R. I.

BOSTON OFFICE • 161 Devonshire Street

ATLANTA OFFICE 815 Citizens & Southern National Bank Building

CHARLOTTE OFFICE • 1201-3 Johnston Building



MODEL B SPINNING FRAME

Vol. 50-No. 18

JULY 2, 1936

Sloan Discusses Japanese Imports

THE announced plans of the Government to increase rates of tariff on certain limited classifications of cotton textiles will not serve the purpose of restricting Japanese imports, according to George A. Sloan, former chairman of the Cotton Textile Code Authority. Nevertheless Mr. Sloan feels that the action to be taken by the Government, as of June 20th, next, is a progressive, and not a backward step, in that it reflects the Government's concern over the harmful effects of low wage foreign competition upon American industry and particularly upon the employment situation in American cotton textile mills.

in commenting upon the facts leading up to the recent action taken in Washington, Mr. Sloan referred to the tremendous increase of Japanese imports during the first three months of 1936, which, he said, amounted to 21,530,000 square yards as compared with 12,772,000 square yards in the corresponding period of 1935 and 450,000 square yards during the corresponding period of 1934.

RE-EMPHASIZES INDUSTRY'S POSITION

Mr. Sloan's statement continues:

"In its efforts to further national recovery, the cotton textile industry increased its hourly rate of wages and decreased the hours of its work week relatively more than any other important American industry. In both respects it had previously been out of line with other domestic industries, but not so with other cotton textile producing countries. Wage standards in American cotton textile mills have for many years been higher than those of cotton mills in all other countries.

"With the increased labor costs, resulting from recovery measures, it was not surprising to find a shrinkage of approximately 60 per cent in our export business. We anticipated the loss of some export volume. Nevertheless, we felt justified in the hope that the Government would assist in preserving our normal export business to the Philippines, Cuba and certain other Latin-American countries. So far as the home market is concerned, we were definitely promised at the time of submitting the first code that our improved wage and hour standards would be protected.

"Since the discontinuance of NRA, the rank and file of American cotton mills have made a splendid record in maintaining wages and hours on a voluntary basis. Indeed, the so-called Robert report on post-NRA conditions placed the cotton textile industry, along with several others, at the top of American business on the basis of voluntary adherence to former basic code standards. This is all the more significant when considered in the light of the industry's losses during the past two years. The

Federal Trade Commission has recently reported that during the first six months of 1935 the American cotton textile mills were losing money at the annual rate of 3 per cent on their investment.

OUR WAGES VS. JAPAN'S

"It has been demonstrated that largely because of wages, which are no more than 12 to 15 per cent of those paid in American cotton mills, the Japanese are able to realize a good profit at prices much lower than quotations, which mean actual losses to American manufacturers. Since this competition is almost entirely on a price basis, and since the lower Japanese prices are possible only because of lower wages, the threat of these imports to continued maintenance of fair wage levels in the American cotton textile industry can no longer be ignored.

It is true that the Japanese imports of cotton textiles to date represent a relatively small proportion of our total domestic production. Nevertheless, they are concentrated on a few types of cloth. For example, in 1935 imports from Japan of bleached cotton goods were 30,638,189 square yards, or 20 per cent of our domestic production of that type. For January, 1936, these same goods were coming into the United States from Japan at the rate of 70 million square yards per year. The situation is also serious in colored cotton fabrics. Perhaps the most critical competition is to be found in cotton velveteens, a branch of the industry not covered by the receent tariff increase, where imports during 1935 were more than 50 per cent of our domestic production of these goods for that year.

"In January and February of this year there were imported from Japan 4,500 square yards and 9,500 square yards, respectively, of cotton terry-woven pile fabrics. This is the first instance of such importations from Japan. These and other examples convince us that there is no limit to the volume and diversification to which Japan can aspire. It is equally clear that even though Japanese bleached goods were today entirely excluded from our domestic market, it would only be a matter of time before an equivalent volume of other types of Japanese fabrics would be causing the same distress in other branches of the industry.

"A point has been made in one quarter that a 20 per cent increase in bleached goods only represents 3 per cent of the whole domestic production of cotton textiles. Isn't 3 per cent of 2 billion dollars a fairly good sized American industry in itself?

"Aside from the loss of an increasing volume of busi-

(Continued on Page 12)

The Modern Opening Room

By Alfred K. Landau

Saco-Lowell Shops

ITHIN the last ten years improvements in all classes of machinery involved in the processes before carding have been of a fundamental character, not only as regards the construction of the machines but also their operation and management.

The new principles around which this development has been built are the results of experiment and research in many mills, and were inaugurated by the necessity for a lowered production cost as well as by the change in the character of cotton in the last two decades.

One of the important changes in the philosophy of the opening room is that regarding conditioning and blending of the stock. In past years while mills were aware of the necessity for some sort of blending, they were content with such mixing as could be obtained by opening from five to ten bales at the side or rear of the bale breaker, and then depending on the crew of the opening room to hand mix these bales by taking equal portions from each bale and throwing them into the hopper of the bale breaker. In theory the bale breaker would quickly reduce the large pieces deposited by means of the lifting apron spikes in the hopper, and these small pieces, being rolled around by the combined action of the lifting and bottom aprons, should have become a homogenous whole.

In actual practice, this was far from the case; for example, stock which was supposed to be composed of a five-bale mix, was in most cases really a three-bale mix.

The mills were more or less satisfied with this kind of opening, because they thought that the blending would be completed by the doubling of laps on aprons of the intermediate and finisher pickers, which, while true to an extent, was a very expensive way of doing an important job very poorly.

As the character of the cotton changes, and the staple becomes more and more irregular, the need for better blending becomes more and more urgent. Necessity being the mother of invention, modern blending systems soon were playing an important part in mill economics. Mills soon realized this was a fundamental improvement in the field of cotton spinning, and today, the mill without a modern blending system in the opener room is under a tremendous handicap as to cost, production and quality. So much is this the case, it is safe to predice that in a few years, the old type opener room, with its clouds of dust and lint, unconditioned atmosphere and inefficient blending, will not be tolerated.

In a less degree will this be so in the picker room; three-process picking has already disappeared except in a very few mills, and the air conditioned picker room no longer excites comment in the textile field.

While cotton in the bulk may be subjected to very high pressure without any injury to the staple, the mechanical

opening or fleecing of the cotton is liable to damage it seriously. This liability increases as the density of the bale is increased, so that "high density bales" need to be processed with great care in order to avoid reducing the intrinsic strength of the staple.

The action of opening or fleecing the cotton releases impurities.

The means employed depends to a great extent on the grade of the cotton, its description and the amount to be processed in the ordinary working day.

In the modern opening room the prime requirement is adequate blending and cleaning. The accepted method at the present time begins with the use of blending feeders, generally operated in batteries of three to ten, depending on the amount of cotton to be mixed.

The capacity of the feeder is generally figured at 350 to 400 pounds per hour. The lifting apron in these feeders is generally made with fine pins so that the action of the coming roll and the fine pin lifting apron results in the loosening of the stock and its reduction to small flakes. The hoppers on these machines are all enclosed, and are provided with exhaust fans, which, in the most modern installations, are connected to an air filter. If the air filter is not available, the exhaust can be piped to the dust hours or outside atmosphere. In this manner, all the dust and fine lint is removed as soon as separated; the dust and waste being retained in the filter and the air returned to circulation.

The battery of blending feeders generally discharge to a feed table, which in turn delivers to either a bale breaker with a fine pin apron or to another blending feeder. In this manner, the mix of cotton from the entire opening is thoroughly blended into a homogenous whole, nearly reduced to a "fleecy" condition, and in prime shape for further processing.

FURTHER OPENING AND CLEANING

The cotton from the last blendin gfeeder or bale breaker, as the case may be, is carried by a short feed table to the inlet of the vertical opener.

The vertical opener fis a very versatile and useful unit, thoroughly efficient with a selective action which enables it to function without any injury to the staple.

Since the air current, with the cotton, enters at the bottom and delivers at the top, the cotton is travelling directly against the force of gravity, as well as against the bars which surround the cylinder.

Since the so-called "cylinder" is really cone shape, the angular velocity increases from the lower blades to the upper. We thus have a gradual opening and passage of the small aggregates entering the unit, with the larger ones being retained, by gravity, among the lower blades until they have been sufficiently broken up to be moved

by the air current to the faster moving blades at the top, and on to the exit pipe.

Owing to the relatively free condition of the cotton entering the machine, it is possible to operate it with a shaft speed ranging from 750 to 900 F.P.M. This gives a peripheral speed of 4,000 F.P.M. at the lower blade, to 9,000 at the top.

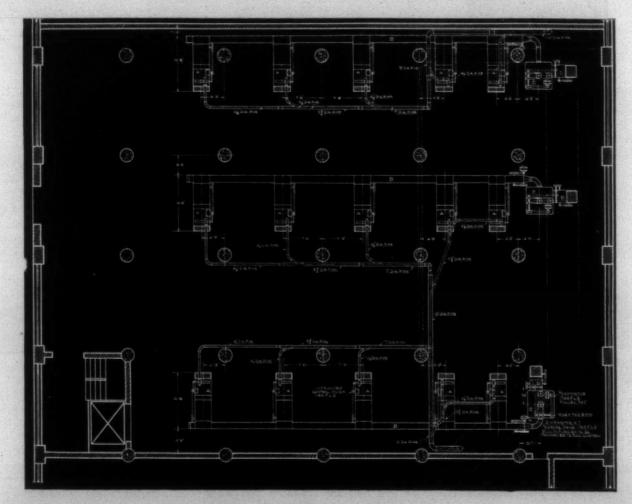
The high speed of the conical beater quickly causes the cotton to rise and follow the current of air which is rushing through the machine. On the other hand, the force of gravity is acting on the mass of cotton to hold it back. In addition to these two forces, the centrifugal force as well as the blows of the picks on the discs of the beater are throwing the heavy impurities against the grid bars by which the beater is surrounded.

As the flake of cotton meets the picks on each succeeding disc, the size is consistently reduced; each reduction in size improves the "fleecing" and liberates additional impurities, until the last row of discs throw the cotton to the exit pipe and on to the next unit in the cleaning

It should be noticed in studying the action of this

machine, that the current of air is being constantly broken by the several discs; which, while making the same number of revolutions per minute, have a different periphal speed. It is this fact which allows the vertical opener to exercise a discriminating cleaning action. For, if the current of air passed right through the machine, it would carry the cotton with it; but being broken by the different discs, the passage of a piece of cotton against the force of gravity, in the air current, is impossible until it is reduced to the proper size.

By adjusting the distance of the grids from the discs, and regulating the air current, the extraction of waste can be regulated to meet any set of reasonable demands. The waste extracted in this unit will vary from 3/4 to 13/4 per cent, depending on the rate of production, the beater speeds, the setting of the grid bars, and the kind of cotton. The bars are generally triangular in shape, built in four sections of 30 bars each, and each section being divided into two parts. These bars are adjustable throughout the entire enclosure, and, in the modern machine, are strong enough to stand the hard usage and wear encountered through high production demands.



FLOOR PLAN OF A MODERN OPENING ROOM

Ample room for laying out a large number of bales at each feeder, adequate provisions for blending, and a special feeder on each line for handling mill or reworked waste, is typical of the modern opening room. The cleaning after blending is done with vertical openers, which deliver the stock to the trunk line connecting the opening room to the picking room. The feders are synchronized with the pickers by means of the electrical control. This system is efficient, economical and simple.

A—Blending Feeders. B—Mixing Feed Tables. C—Vertical Openers. D—Screen Sections.

A MODERN OPENING ROOM

Clean, with plenty of floor space to permit large mixes, ample equipment to assure thorough blending at high production rates, this is typical of present-day opening room

design.
With high drafts and reduced doublings in the card and spinning rooms rapidly becoming standard practice, the importance of blending cannot be overlooked.





ANOTHER VIEW OF THE SAME OPENING ROOM

Showing the feed tables delivering the stock from the blending feeders to the vertical openers. The trunks connecting the screen section, at the delivery side of the vertical opener, to the picker room distributor system, is also seen at the right of the photograph.

The cleaning machines with the Buckley, or "striker type" beater, generally follow the vertical in modern arrangements.

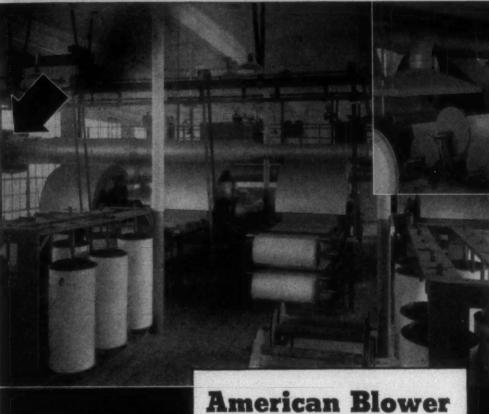
In general, the Buckley type beater is constructed by riveting rectangular picks to the supporting discs; these discs being placed on a shaft with the proper separators to keep the correct spacing. The discs are so arranged that the picks do not follow each other in a straight line, but in a spiral; thus the entire length of fringe at the feed rolls is acted upon by the successive picks.

Another important detail wherein a cleaner of this type differs from the vertical, is in feeding of the stock. In the lattice type opener, in place of the pipe delivery, there is a set of feed rolls, very strong and heavily drafted. In one of the most successful types, the feed rolls are placed in a horizontal position, directly over the beater and are fed vertically downward right into the path of the advancing picks. The grids bars begin at the feed rolls, and extend for about 270 degrees of the entire circumference—about 200 degrees of this circumference is a dead air space waste chamber.

There are three elements which make this machine extraordinarily efficient as a cleaning agent. First, the manner in which the stock is presented—the condenser, collecting and sheeting the stock from the vertical opener, forms a fairly uniform mass of varying thickness, which is rapidly passed into the heavy spiked and fluted rolls. There is a very high draft between these rolls and the final set of small feed rolls, so that any large pieces of cotton are literally pulled apart and in this manenr a very thing sheet is presented to the action of the cylinder.

The picks on the beater pull this fringe apart in tufts, which are strongly hurled against the bars. Since the tearing of the sheet into tufts loosens up such impurities as have not been extracted at the vertical, these, on account of the heavier weight, are left behind as the cotton is swirled along under the influence of the heavy air current, and eventually pass through the bars into the dead air dust chamber.

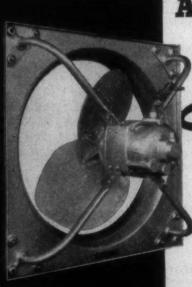
Following the lattice opener, there is a screen section which collects the loose cotton into a fluffy sheet, and by (Continued on Page 8)



A typical installation of an American Blower Ventura Fan for Slasher Exhaust in a large Southern Mill. The arrows indicate the location of the fans.

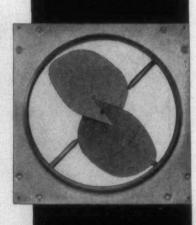
. .

Below, view showing the reinforced wheel of American Blower Ventura Fans for heavy



lasher

FOR TEXTILE MILLS



The American Blower Corporation, one of America's oldest and largest manufacturers of Air Conditioning and Air Handling equipment of every type and description, has developed a special Ventura Fan for slasher exhaust. This fan is built with extra heavy reinforced, wide-bladed aluminum wheels and equipped with special enclosed acid resistant ball-bearing motor. It may be used for either horizontal or vertical operation. Complete fan and motor are treated with "Glyptal." Many of these fans are already giving highly satisfactory service in a number of Southern mills. We will be glad to give you complete information on American Blower Slasher Fans, also on American Blower equipment for air conditioning, mechanical draft, dust collection—in fact, everything that deals with the handling of air, heating or cooling. There is no obligation.

AMERICAN BLOWER CORP.

6000 Russell St.

Detroit, Michigan

Division of American Radiator and Standard Sanitary Corp.

AMERICAN BLOWER CORPORATION 6000 Russell St., Detroit, Mich.

Please send information

Representative [

Name

Firm Name.

City and State____

The Modern Opening Room

(Continued from Page 6)

means of a powerful air current, separates such peppery leaf, fine dust and other light impurities as may have escaped the separating action of the grid bars.

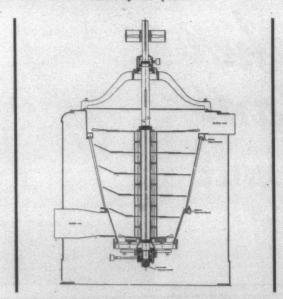
In general, cleaners of this type should remove from 1 to 1¾ per cent waste, exclusive of that extracted at the screen section. When processing clean cotton, on low grades, this extraction may go as high as 4 per cent.

AIR FILTERS

For best results, all the fans employed in this system of opening should exhaust into an air filter, and the room itself should be equipped with sufficient humidifiers to enable the cotton to take up a greater part of the natural moisture content.

This procedure will be found of benefit, not only by cutting down the invisible waste percentage, but through the better working of the stock, the more even numbers and better conditions in general.

To condition the air in the average opener room, without exhorbitant expense, the same air must be used over and over. To do this, it is necessary that the fans discharge into suitable air filters, which, after extracting the lint and dust, return the discharge into the room, instead of into the dust cellar or atmosphere where the heat and moisture will be wastefully dissipated.



The modern Vertical Opener, showing the discs which fling the cotton against the grids, with varying intensity. Gravity holds the heavier pieces in the lower, or slow movinf, range until the weight is reduced so that the combined force of the air current and the lifting action of the disc causes it to move to the next higher range. In this manner, the opening is uniformly and effectively accomplished.

This is a very effective machine, even at high production rates; adaptable to all kinds of cotton; and economical to operate.

The use of air filters is rapidly becoming general; there are several types in use. Some make use of burlap or other fabric as the filtering media. Others have a series of screens which trap the fine lint particles and in a few minutes build up a self-filtering medis. Any type which

is efficient will soon earn a handsome return through the savings it makes.

In general, the principal points to be noted in an opening line of this description are as follows:

1. The arrangement for feeding the various bales opened at one time on the floor of the opening room is an assurance that the resulting mixture will be an even and thorough blend of high uniformity, well conditioned, thoroughly opened and well cleaned.

2. Placing the vertical opener and the lattice cleaner in range, passing the stock through the necessary condensers and screen sections and using conditioned air, affect a certain amount of aeriation which is of benefit to the working qualities of the cotton, as well as adding a certain amount of "bloom."

3. Since the cleaning is accomplished by a combination of the action of the fine spiked lifting apron, the dusting and swirling action of the vertical, and the combing action of the lattice, there is no harsh action of any kind which will result in a weakening or bruising of the staple.

4. There are ample points provided for the extraction of all classes of impurities, as follows:

(a) Through the fan at the dome of the blending feeder.

(b) Through the grids of the blending feeder.

(c) In the vertical opener.

(d) At the screen section or condenser following the vertical.

(e) In the lattice opener.

(f) At the screen section following the lattice opener. The equipment as outlined above will, in general, give a very satisfactory performance on any kind or class of cotton up to a staple length of 1½ inches. For the longer staples, there will of necessity be some modifications, principally in respect to the use of the vertical opener. A system of this design, with the proper controls, will operate with a minimum amount of labor, since there is no need for a hand to touch the cotton from the time it is placed in the hopper of the blending feeder, until the lap

is doffed at the head of the picker.

The one-process picker and electric control systems will be the subject of part two, in a few weeks.

Approve Reorganization

Dallas, Tex.—Judge W. H. Atwell gave final approval June 22nd in United States District Court for a reorganization plan for the Texas Textile Mills, Inc., whereby bondholders will receive 50 per cent of the face value of their holdings. The plan provides that Dallas, Kansas City and Fort Worth properties may be sold if necessary to provide cash for the creation of the new corporation and for improvements to be made on the Waco and Mc-Kinney plants. The plan provides for \$60,000 to be spent in improving the McKinney plant and \$40,000 for modernizing the Waco property.

QUITMAN, GA.—Possibility that the Morgan Cotton Mills, idle for months, may resume operation soon, was seen here as J. D. Phillips, treasurer of the company, held conferences with local leaders. It has been suggested that the plant, now equipped for manufacturing tire fabric, might be shifted to the production of some other material.



Personal News

S. A. McCash has been promoted to overseer carding at the Eagle and Phenix Mills, Columbus, Ga.

W. H. May, president of the May Hosiery Mills, Burlington, N. C., has returned from a cruise around the world.

W. T. Clement has been promoted from superintendent to manager of the Pomona Manufacturing Company, Greensboro, N. C.

R. A. Whatley, of Charlotte, has become superintendent of the Pomona Manufacturing Company, Greensboro, N. C.

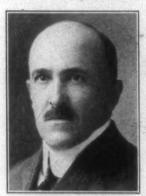
J. O. King has resigned as overseer of weaving at the Werthan Bag Company, Nashville, Tenn., to accept a similar position at the John P. King Manufacturing Company, Augusta, Ga.

T. Leroy Smith, of Charlotte, sales representative for the Clinton Company, who was seriously ill for several weeks, is very much improved and expects to be out again within a few-weeks.

Edwin Howard, Southern manager of the Veeder-Root Company, Hartford, Conn., who was elected chairman of the Associate Members' Division of the Southern Textile Association at the recent annual convention in

Blowing Rock. He succeeds W. B. Uhler, of Spartanburg, who served as chairman during the past year.

Mr. Howard is one of the veteran machinery men in the Southern field and is one of the best known men in the industry. During his long service in the South he has been consistently interested in the work of the Association and has been a regular attendant at the meetings over a long term of years.



Edwin Howard

Virgil E. McDowell, who graduated at Georgia Tech in 1914, and who for the past ten years has been overseer of carding and picking at the Eagle and Phenix Mills, Columbus, Ga., has resigned his position there.

W.O. Parson, of Roanoke, Va., has been appointed sales representative for the Piedmont Supply Company, of Charlotte, for the western part of the Virginia territory. The Piedmont Supply Company has been made distributor for exclusive territories in the Carolinas for the Mexico Refractories, Mexico, Mo., manufacturers of fire brick, plastic furnace lining and similar products.

F. Gordon Cobb has resigned as executive vice-president of the Pomona Manufacturing Company, Greensboro. N. C., and at present is making his home at the Charlotte Hotel, Charlotte. Mr. Cobb took charge of Pomona some months ago with the understanding that he was to remain long enough to put the mill on a paying basis which he accomplished within a few months after going there.

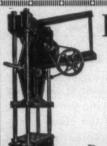
IF IT'S PAPER Send Us Your Order

Cloth Winding Boards
Jacquard Board—Beaming Paper
Toilet Tissues
Twines—Wrapping Paper—Boxes, etc.

DILLARD PAPER CO

GREENSBORO, N.C. GREENVILLE, S.C.





BALING PRESS

Motor Drive, Silent Chain, Center of Screw.

Push Button Control—Reversing Switch with limit stops up and down.

Self contained. Set anywhere you can run a wire.

Our Catalogue sent on request will tell you more about them.

Dunning & Boschert Press Co., Inc. 328 W. Water St. SYRACUSE, N. Y.

WENTWORTH

Double Duty Travelers

Last Longer, Make Stronger Yarn, Run Clear, Preserve the SPINNING RING. The greatest improvement entering the spinning room since the advent of the HIGH SPEED SPINDLE.

Manufactured only by the

National Ring Traveler Co.

Providence, R. I.

31 W. First Street, Charlotte, N. C.

Reg. U. S. P. O.

Summer Meeting and Outing Piedmont Section A. A. T. C. C.

EARLY 200 members and guests attended the summer meeting and outing of the Piedmont Section of the American Association of Textile Chemists and Colorists, which was held at Ocean Forest Hotel, Myrtle Beach, S. C., June 27th. It was one of the largest registrations and one of the most enjoyable meetings in the history of the organization.

Following the usual custom, there were no business sessions, the entire day being given over to sports and other recreation.

There were approximately 75 entries in the golf tournament, which was played Saturuday morning over the heart-breaking Ocean Forest Country Club course, and as usual the narrow fairways and abysmal sand traps took a heavy toll in soaring scores and lost religion. Out of the entire entry list, only nine players finished with better than 100. Wallace Newman, son of D. C. Newman, was assigned the mammoth task of posting the scores.

The players were divided into two groups: those with handicaps of 20 and under, and those with handicaps of 21 and up. Winners in the former group were: Cliff C. Meyers, low gross; R. R. Dorsett, second low gross; Jack Button, low net; R. E. Sumner, second low net; S. A. Petters, third low net. In the second group the winners were: J. D. Sandridge, low net; Tom Kitchen, second low net; S. Quern, third low net. M. M. Calhoun won the prize for high gross in both divisions, with a score of 123, which included all putts.

The tournament committee was composed of D. C. Newman, chairman, Tom Johnson and J. Hillman Zahn.

A bridge tournament for the ladies was held Saturday afternoon, in charge of a committee composed of Mrs. Chester L. Eddy, Mrs. Raphael E. Rupp, Mrs. E. H. Dobbins and Mrs. Harold Goller.

The climax of the meeting was the banquet which was held in the dining room of the Ocean Forest Hotel Saturday night, followed by dancing on the patio and in the ball room. Arrangements for the banquet were made by Harold Goller, and the dance was in charge of Robert Sloan.

Golf prizes were presented by D. C. Newman, and bridge and other prizes by Chairman Chet Eddy.

The reception committee for the meeting was composed of Chairman Chet Eddy, Vice-Chairman Tom Smith and Sam Hayes. The registrations were handled by Miss Evelyn Garrison.

Officers of the Piedmont Section of the A. A. T. C. C. are: Chester L. Eddy, chairman; Tom R. Smith, vice-chairman; Raphael E. Rupp, secretary; Lawton W. Cleveland, treasurer.

Chairman Eddy appointed the following to serve on a nominating committee which will report at the fall meeting when officers for the ensuing year will be elected: James D. Sandridge, Grady Miller and Tom Church. A

committee composed of Arthur Thompson, Graham Mc-Nab and J. H. Zahn will make arrangements for the fall meeting, which will be held in Charlotte.

The writer was greatly disappointed to find that a slight defect in the camera prevented the development of a number of pictures which were taken during the day and which were to have been published with this account of the meeting.

Those who registered for the meeting were:

D. D. Barratt, Anderson, S. C. Mr. and Mrs. Wm. Bertolet, Philadelphia, Pa. Rudolph Born, Springfield, Mass. Mr. and Mrs. Arledge Boyd, Roanoke Rapids, N. C. H. Boyd, Charlotte, N. C Mr. and Mrs. C. K. Brooks, Travelers Rest, S. C. J. M. Brown, Charlotte, N. C. Mr. and Mrs. Bruce, Greensboro, N. C. Dick Bruning, Greensboro, N. A. J. Buchanan, Charlotte, N. C. Mr. and Mrs. R. E. Buck, Greenville, S. C. Kester Burrow, High Point, N. C. Kester Burrow, High Point, N. C.
Mr. and Mrs. Burt, Greensboro, N. C.
Mr. and Mrs. J. B. Button, Charlotte, N. C.
Mr. and Mrs. J. Ware Shoals, S. C.
Mr. and Mrs. Tom Church, Charlotte, N. C.
Mr. and Mrs. L. W. Cleveland, Swannanoa, N. C.
Claud Cline, Thomasville, N. C.
H. B. Constable, Charlotte, N. C.
Mr. and Mrs. John Cosby, Greenville, S. C.
I. B. Covington, Wadesboro, N. C.
Harry Curlee, Thomasville, N. C.
T. C. Davis, Charlotte, N. C.
Mr. and Mrs. R. J. Dean, Charlotte, N. C. Mr. and Mrs. R. J. Dean, Charlotte, N. C. John Dewey, Anderson, S. C.

Mr. and Mrs. Henry Dixon, Burlington, N. C.

Mr. and Mrs. E. H. Dobbins, Lyman, S. C. Mr. Dohner, Philadelphia, Pa. Mr. and Mrs. R. R. Dorsett, Anderson, S. C. James Durland, High Point, N. C. Mr. and Mrs. Easley, Lyman, S. C. Mr. and Mrs. C. L. Eddy, Travelers Rest, S. C. Lyman Eddy, Travelers Rest, S. C. Mr. and Mrs. Threngart, Linden, N. J. Mr. and Mrs. Threngart, Linden, N. J.
Max Einstein, Charlotte, N. C.
Leonard England, Greenville, S. C.
Mr. and Mrs. Frank Farley, Durham, N. C.
Graham Fisher, Greenville, S. C.
T. W. Johnson, Greenville, S. C.
Mr. and Mrs. J. W. Johnston, Charlotte, N. C.
Bob Jouger, Greenville, S. C.
L. V. Fillbeffer, Charlotte, N. C. Bob Jouger, Greenville, S. C.
J. V. Killheffer, Charlotte, N. C.
Mr. and Mrs. L. R. Kinnette, Mooresville, N. C.
W. N. Cline, Jr., Charlotte, N. C.
Mr. and Mrs. E. W. Klumph, Charlotte, N. C.
Ben Lee, Hickory, N. C.
C. M. Lindsay, Spartanburg, S. C.
K. M. Littleton, Jr., Wilmington, N. C.
Miss Polly Lyons, Charlotte, N. C.
Mr. and Mrs. McCamy, Charlotte, N. C.
Mr. and Mrs. McCarty, Charlotte, N. C.
A. R. McCormac, Chapel Hill, N. C.
Mr. and Mrs. J. T. McGregor, Greensboro, N. C.
T. H. McKay, Gastonia, N. C.
Mr. and Mrs. John L. McKee, Chester, S. C.
Miss Constance McKey, Gastonia, N. C. Miss Constance McKey, Gastonia, N. C.
Mr. McKown, Fairforest, S. C.
Mr. and Mrs. A. G. McNair, Charlotte, N. C.
Mr. and Mrs. Troy McWhorter, Charlotte, N. C. E. E. Flowers, Lyman, S. C.

(Continued on Page 18)

Sloan Discusses Japanese Imports

(Continued from Page 3)

ness in certain well defined branches, the most serious effect of these imports is to be found in the general price structure of all American cotton fabrics. I have previously referred to the Federal Trade Commission's findings. Do the critics who are opposed to the tariff action recently announced by the Government want us to make up these heavy losses by reducing American wages to Japanese levels? Certainly not. In any event, the leaders in the cotton textile industry have no such desire. They are doing everything possible to encourage the maintenance of fair wage levels.

"It is not a case of criticising Japanese employers or Japanese wage levels. That, after all, is none of our business. But is very much the business of the Government and the public to co-operate with this industry and other industries in preserving fair standards of wages and hours in America.

"Reference has also been made to the possible effects of the recent tariff action on our raw cotton exports. What are the facts? For the cotton season 1932-1933, 63 per cent of the cotton consumed in Japan was American.

"Unhappily the indications are that America is losing at both ends—first, through reduced takings of our cotton by Japan, and secondly, by the enormous increase in the consumption of Japanese cotton textiles in the United States. If Japan finds it to her advantage to buy American cotton, she will do so regardless of any reasonable protection that may be thrown around wages and hours in this country. If Japan finds it to her advantage to buy cotton elsewhere, she will do so regardless of our seeming willingness in recent years to allow Japanese imports to pyramid at the expense of American production and employment.

"NEVERTHELESS, ITS PROGRESSIVE"

"If corrective measures meant relieving one class or one section of our country at the expense of others hesitation to curb these imports might be justified. But continued tolerance is against the interest of American agriculture and industry alike. American cotton mills consume American cotton almost exclusively, whereas during the past two or three years only 50 per cent of Japan's total consumption has been of American growth. Thus every yard of Japanese cloth consumed in this country at the expense of domestic cloth production, means a narrower market for the American cotton farmer.

"The advance of 42 per cent in tariff duties on a relatively few cotton textile items, in the face of the breakdown on the part of the Japanese in their voluntary agreement with the United States Government is not a regrettable backward step. It is a progressive step. While it will probably not prevent the importation of one yard of Japanese cotton goods, it nevertheless is a progressive step in that it reflects the concern, if not the alarm, of our Government over the threatened breakdown in American wage and hour standards. Obviously, the industry is helpless to cope with the situation without the active support of our Government.

"In 1926 there were 37,700,000 spindles in place in the cotton textile industry of the United States and 5,447,000

in Japan. Today there are approximately 28,500,000 spindles in the United States and 10,500,000 in Japan. We do not regret the development or growth of Japanese industry, but we view with apprehension that phase of its recent development which has made tremendous inroads into our domestic markets at a time when higher living costs in America have called for higher wages, shorter hours, and consequent increased cost of manufacture.

"I think I am correct in stating that there is no other country in the world which has left open its home market to the Japanese where the country has, within itself, an industry sufficient to supply its total domestic needs. Our equipment and available labor in the cotton textile industry in the United States is more than sufficient. Under these circumstances, Japan certainly cannot regard protective action by this country as an unfriendly gesture. Undoubtedly, she will regard such action as a natural result of our internal economic conditions."

Army Orders On Textiles

Philadelphia.—Army Quartermaster Depot awarded a large number of contracts for textiles. On Invitation 309, George Wood Sons will supply 19,520 yards silesia at 14.48c and 11,150 of cotton twill at 22.47c; Harodite Finishing, 4,200 yards cotton padding at 9.75c; Felters Company, 500 yards interlining at 45.5c; Union Padding, 625 sheets cotton wadding at 3.44c; Batavia, 44,625 yards drill at 11.53c, and American Felt, 300 yards under collar cloth at \$1,10.

Invitation 340: Nantex Manufacturing will supply 250,000 pairs cotton drawers (shorts) at 19.5c.

Invitation 334: Cannon Mills will furnish 200,000 huck towels at 8.84c, and Cone Export & Commission, 50,000 Turkish at 24.66c; also 500 cotton blankets on Invitation 311 at \$1.30.

Contracts for 500,000 pairs of cotton socks, Invitation 335, went to A. W. McCellan, 7.4c per pair and 700,000 pairs light woolen socks to William G. Leininger at 15.49c.

Invitation 336: Contract for 54,000 pairs cotton wool mixed drawers to Fuld & Hatch Knitting Co. at 79.25c and 80c; 30,000 cotton wool undershirts to Faith Mills at 82.5c; Gardiner Warring will supply 30,000 knit undershirts at 13.5c and Norwich Knitting, 107,000 at 13.37c and 13.67c.

More Government Cotton Available At Once

Washington.—The Commodity Credit Corporation acted at the week-end to relieve the acute shortage of staple cotton faced by the domestic mills, making known that it would release additional fiber held under the 1936 loan. The price on the new releases will be 12½ cents a pound on the 12-cent loan and 11½ cents on the 11-cent loan.

Producer borrowers or their authorized agents will be able to obtain the cotton on requests filed on the corporation's Form M of 1934-1935 under postmark not later than July 20th. Conditions will remain the same as for the previous releases except for the price. The staple will also be available for immediate export.

Notes On Cotton Warp Sizing

By Ralph Hart

Hart Products Corporation

Fifth of A Series of Articles on This Important Subject

Addition of Antiseptics.—If a separate antiseptic is used, it is better added at the completion of the cooking, so that it may exert a minimum effect on the starch and, if it is volatile, the loss will be reduced to a minimum.

Temperature in Size Box.—Temperatures in the sizebox may vary from 170° F. to 210° F., depending upon construction of the warp and conditions in the mill. The higher temperature has the advantage of giving better penetration, though it may have a greater tendency of thinning out the size and so give a smaller size take-up. Some advantages in tensile strength and improved weaving-properties of the yarn have been claimed for sizing at lower temperatures, viz., about 170° F. At the latter temperature, it is stated there is less degradation of the starch and also a greater take-up of size by the yarn, due to the thickening of the starch-paste. It is generally conceded, however, that better sizing is obtained by keeping the temperature in the size-box as high as possible. In one set of experiments on 22s yarn, there was a definite increase in breaking strength as the sizing temperature was increased. This is shown in the following table:

	Temperature of Size-Box °F.	Ends Broken, per Yd. of Cloth	Breaking Strength oz.	Gain
Unsized yar	n	antaba .	10.03	
	171	0.77	12.76	27.21
	197	1.07	13.19	31.50
	207	1.13	13.46	34.19

Time of Cooking.—As has already been mentioned, prolonged cooking and agitation break down the starch sacs, causing a thinner starch-paste. The more the granule-covering is disintegrated or fragmentized, the thinner the paste; the most fluid paste for a given starch is obtained when the covering becomes completely soluble or nearly so. The disintegration of the sacs and consequently the drop in the viscosity or body of the paste is most pronounced at first, but finally reaches a stage when further processing produces comparatively small changes. Evidently the starch-paste at this stage is best adapted for the most uniform sizing. The amount of cooking and agitation required to reach that stage varies with different starches and with the same starch depending upon the method of preparing the paste. There are consequently many opiinons as to the time required to cook a given starch to obtain the best results.

The usual mill-practice is to bring the starch-mixture to a boil within 20 to 30 minutes, and to keep it at the boil for a definite period, depending mainly upon the nature of the starch. It is recommended that thick-boiling corn starch be cooked for 1 hour and 15 minutes to 1 hour and 45 minutes; thin-boiling starch, 30 to 45

minutes; potato starch, about 2 hours; sago flour, 2 to 4 hours; and tapioca, the same as corn starch.

Uniformity of Size-Mixture.—The best way to obtain the most uniform size-mixtures is to prepare it in comparatively small batches. The ideal condition is when the kettle of size can be used within an hour from the time it is finished, inasmuch as both stirring and heat have a considerable action on the fluidity of the starch. It is especially detrimental to keep the size-mixture overnight or over the week-end. Some mills manage to produce only the amount of size required for the day and if any is left over at the end of the day it is thrown away. Others prefer to use such material, either as is, or, to mix it with fresh size the next day. A starch mixture that has once congealed and is then reheated is necessarily an inferior size. If size must be stored overnight, it should be kept hot, as gelatinized starch-paste upon re-heating will not have the viscosity, uniformity and smoothness of fresh size.

Automatic Temperature Control.—It is generally conceded by mill men that temperature controls on the slasher are quite essential for best results. Temperature control on the size-kettle permits the gradual, uniform, and duplicable gelatinization and boiling of the size with the minimum attention by the attendant. Temperature control on the size-box tends to give a more uniform size take-up and, on the cylinders, yarn with more uniform moisture content and free from baked size. There is also a saving of steam, as the slashers require only ½ to 2 pounds of steam pressure for efficient operation.

Wetting Power of Size.—Experiments on this subject have shown that raw cotton is capable of being completely wetted-out by hot size. In practice, however, the wetting is dependent to a considerable extent on the application of mechanical pressure, which spreads the size over and forces it into the cotton yarn. The conclusion is drawn that thorough wetting of cotton by size can best be effected by working as near to the boiling point as possible and by taking care that the squeeze rolls exert effective pressure on the wet yarn.

Stains on Sized Yarn.—Stains arising in sizing may be due to hard size, wet drippings from the hood, or by rusty size. Stains are also caused by burnt starch. In one case this trouble has been remedied by moving the coils in the storage kettle further apart.

PENETRATION OF SIZE

The penetrating power of size into the yarn depends upon many factors, such as the temperature of sizing, concentration and viscosity of the starch-paste, twist and

(Continued on Page 18)

TEXTILEBULLETIN

Member of
Audit Bureau of Circulations and Associated Business Papers, Inc.
Published Every Thursday By

CLARK PUBLISHING COMPANY

Offices: 118 West Fourth Street, Charlotte, N. C. Eastern Office: 434 New Industrial Trust Bldg., Providence, R. I.

DAVID CLARK	Managing Editor
D. H. HILL, JR.	Associate Editor
JUNIUS M. SMITH	Business Manager

SUBSCRIPTION

One year, payable in advance	\$2.00
Other Countries in Postal Union	4.00
Single Copies	10

Contributions on subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

ER, ED, ET, and ES

WE did not intend to comment upon the political convention, held at Philadelphia last week, but we can not allow to go unanswered the attack of Candidate Franklin D. Roosevelt upon American industries.

With vitrolic words he referred to Economic Royalty, Economic Dynasty, Economic Tyranny and Economic Slavery, thereby adding to the New Deal alphabet as features of the coming campaign the E R, E D, E T and E S.

About 160 years ago the wealth of this country was so limited that we did not have assets sufficient to justify an issue of currency but today we have more than 60 per cent of the wealth of the world.

The wealth which has come to us and the prosperity which has been ours, was secured partly from the soil, but we could never have reached our present position except through the development of our industries. Throughout our career our industries have paid higher wages and their employees have enjoyed the best working and living conditions of any section of the world.

A few industries have been built by individuals, but in most instances they represent the pooled resources of a large group of citizens. Such citizens expected to secure a fair return upon the money invested but many of the industries, especially those in small towns, were built

primarily to give employment to citizens or those who would come because of the opportunity for employment which the new industry would offer.

The man most responsible for the establishment of the textile industry of the South was the late D. A. Tompkins of Charlotte, N. C.

For many years he went back and forth over the South telling our people that instead of raising cotton and selling it for 5 or 6 cents per pound we should erect cotton mills and sell our cotton in the form of cloth.

The citizens of many towns and villages heard the voice of Tompkins and heeded his advice to build cotton mills. The banker, the cotton buyer and the merchant and their friends raised the money for a few thousand spindles and even though many such mills failed to show an adequate return to those who bought stock, the citizens were well repaid for their venture.

People who had been living in abject poverty upon tenant farms and in mountain coves, brought their families to the mill and for the first time in their lives found themselves able to live in comparative comfort.

The wages which the workers received were paid to the merchants for food and clothing and to the doctors and other professional men for services and a modest form of prosperity prevailed.

The surprising and unexpected result of the new era was that the nearby farmers who had been forced to depend upon cash crops, soon found that the mill villages offered a market for vegetables and other farm products and that an industry in a town was of benefit to all including the farm population.

Those were the days when an industry was regarded as a thing worth while and not as a public enemy. The people who came from the tenant farms and mountain coves worked 60 or more hours per week in the mills but found the work easier than back on the farm where they labored from sunrise to sunset.

Because the entire family had worked upon the farm, the heads of families insisted that the entire family should work in the mill and thereby came the evil of child labor which has been so grossly exaggerated.

In spite of the many wild and vicious statements which have been made about child labor in cotton mills, it was never desired by the mill owners and no one has ever been able to explain how a cotton mill could make more money by employing a young child.

Finally and with the approval of ninety-five per cent of the cotton manufacturers, child labor laws were adopted and for 25 years there has been a minimum age of 14 years for employment in Southern cotton mills.

The story of the cotton mill in the South is not much different from that of industries in other sections of this country.

There may have been times when, due to peculiar conditions, certain industries have made exorbitant profits, but as a rule those who invested their money in industries have not received more than that to which they were justly entitled and the employees have often benefited to a greater extent than the stockholders.

While we were building America, industries were in high regard because they furnished employment to millions and their payrolls sent financial blood coursing through the veins of business.

A man seeking re-election to a great office rose at Philadelphia last Saturday night and as a matter of political expediency, placed industry in the class of public enemies.

He spoke of Economic Royalty, Economic Dynasty, Economic Tyrrany and Economic Slavery. His cause for complaint was that the Sovereign States, which had reserved unto themselves control over the working and living conditions of their own citizens, had refused to surrender such powers to a group of New Deal professors and that the United States Supreme Court had turned thumbs down upon efforts to illegally seize such powers.

Candidate Roosevelt speaks in heated terms of Economic Royalty, Economic Dynasty, Economic Tyranny and Economic Slavery and yet fails to point his finger at any industry which justifies his statements.

If failure to obey the dictates of a group of misinformed and prejudiced New Deal Professors justifies such castigations, then industry is guilty but not otherwise.

The people of North Carolina and the Legislature of North Carolina is fully competent to wipe out economic tyranny and slavery if such exists within its borders. Let Candidate Roosevelt point his finger and justify his assertions.

If there be States wherein the people permit injustice and economic evils to exist it only requires the vote of thirty-six States to transfer powers to the Federal Government.

The truth is that the States have been making steady progress in eliminating industrial evils and have been bettering the living and working conditions of their laboring men.

The New Deal leaders have been frustrated

in their plans to regiment the people of the entire United States and establish a tyranny similar to that of old Europe, the very tyranny from which our ancestors escaped when they came across the sea.

Industry has done much for America and seeks neither tyranny nor slavery.

Industry resents being classed as a public enemy even as a matter of political expediency.

Encouraging News

THE market picture in textiles has been almost completely reversed in the past month. Sales of yarns and goods for the past several weeks have been better than for a long time past. The mills are now in the strongest position they have occupied this year. In spite of the larger sales and the higher prices, it is generally agreed that there is yet a great deal of buying to be done.

Sellers of yarn and goods are reported as "being amazed" at the demand for the past three weeks and the whole industry is immensely encouraged over the progress that the markets have made.

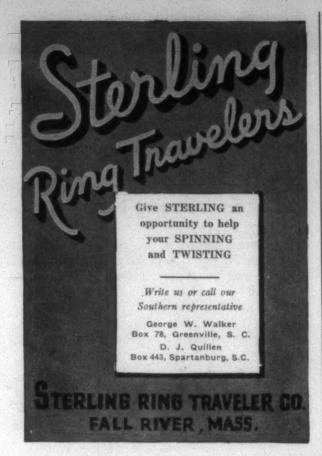
Another encouraging feature is found in reports from the machinery and supply companies showing that they are finding business a great deal better.

One company selling silk machinery reported that sales in June alone were larger than for the whole of last year. Several of our friends in the business tell us that mill men are showing more interest in new equipment than has been the case for a long time and that actual sales are increasing steadily.

It appears now that many manufacturers who have been delaying the purchase of new machinery for a long period have decided that they are now justified in placing orders. Many of them have been suffering from competition from the better equipped mills and have found plant improvement is necessary to put them upon a more equal basis with the modern mills.

It is, of course, true that if all mills had the latest equipment they would not enjoy an advantage in this respect. However, those who are modernizing now will have a distinct advantage over those who continue to operate old equipment.

The better market position will enable many mills to show larger earnings during the last half of the year and we believe that increased profits will be quickly reflected in machinery sales.



To Insure PERFECT-UNIFORM-SOFT-BOBBINS on your Flyer Frames, use

THE NORLANDER FLYER PRESSER

For 35 Years Highest in Quality-Lowest in Price

The Norlander Machine Company

Gastonia, N. C.

New Bedford, Mass.

OUR MOTTO

QUALITY AND SERVICE AT A MINIMUM COST Has realized thousands of repeated orders

The Ideal Non-Separating, Dripless, Wasteless **Textile Lubricant**

Originated—Developed—Perfected by SWAN-FINCH Specialists in Scientific Lubrication since 1853

SLO-FLO outlasts liquid oil 3 to 5 times—saving oiling cost. SLO-FLO remains in the bearings and does not creep or spatter—reducing "oil spots."

Write for Bulletin on Cotton Mill Machinery Lubrication and liberal Trial Order Terms.

SWAN-FINCH OIL CORPORATION

205 EAST 42nd STREET, NEW YORK, N. Y.

Mill News Items

GOLDSBORO, N. C.—The Borden Manufacturing Company, manufacturers of 10s to 30s single cones, tubes and warps, has had a modernizing program under way here at the two buildings on North William street. The program calls for the rearrangement of the present equipment and the installation of new equipment. Between \$50,000 and \$60,000 will be expended on this project.

ALABAMA CITY, ALA.—The \$200,000 addition to be built to the Alabama City plant of the Dwight Manufacturing Company will not result in any increased capacity, it is explained. This new building is entirely to house a new slasher room. At the present time, the slashers are not only badly located, but extremely congested, it is further stated.

The new building should be completed by October 1st. A 10-year exemption from taxes has been granted by the city, as is customary with new developments.

HUNTSVILLE, ALA.—Resumption of additional operations at Lincoln Mills was made known by Phil Peeler, general superintendent. All manufacturing departments except the mop department and No. 1 mill started and will operate on a one-day shift basis.

KINSTON, N. C.-According to an announcement, the second sale of the properties of Caswell Mills, Inc., has been set for July 20th. Some weeks ago the cotton spinning plant in West Kinston and workers' residences surrounding it were sold by United States Court order. However, confirmation of sale was withheld and after a conference with creditors and counsel a resale was ordered. A high bid of \$85,000 was considered too low.

LAWRENCEVILLE, GA.—The Lawrenceville Cotton Mills, idle three years, will resume operation by August 1st, under plans made known locally, and is to employ 200 operatives. R. B. Lowe is president of the new operating corporation; D. C. Finney, secretary-treasurer, and manager. The two, with H. E. Marsh comprising the directorate.

TALLADEGA, ALA.—General Manager McMillan of the Talladega Cotton Factory, manufacturers of hosiery and underwear yarns, using 5,000 spindles, notified operatives that operations would be suspended indefinitely, attributed to unfavorable market conditions.

PELZER, S. C.—Pelzer Manufacturing Company is closed down for purpose of taking inventory, according to notices posted at the plant. It is assumed here that the inventory is being taken preparatory to transferring the mill to the Woodside-Stockton interests who bought the mill some time ago.

E. F. Woodside, who is to be in charge of the mill, has no statement to make beyond saying that the inventory was usually taken at this time of the year.

GREENVILLE, S. C.—Judson Mills of this city will close down for a period of ten days, beginning with Friday night, July 3rd, and reopening Monday, July 13th. Notices to that effect have been posted at the mill.

This is not a "curtailment," it was stated, but largely in keeping with an annual custom to give employees a period of vacation about July 4th.

Mill News Items

Spartanburg, S. C.—Whitney Manufacturing Company is selling lots in the Whitney Mill village and adjacent farm lands to its workers, according to Victor Montgomery, treasurer.

GREENSBORO, N. C.—The contract for the erection of the building for the Carolina Webbing Company, to cost \$35,000, was let last week.

CLINTON, S. C.—Plans for reorganization of Lydia Cotton Mills under Section 77-B of the Bankruptcy Act, have been virtually completed, it was announced by E. M. Blythe, special master in the case.

Plans for the reorganization have been approved by Judge H. H. Watkins in U. S. District Court here. A number of minor claims, including those of attorneys, have not been passed upon, Mr. Blythe stated. Checks due creditors, however, are scheduled to be mailed out in the near future, the special master stated.

DURHAM, N. C.—The Durham Hosiery Mills made known the lease of the old North State Mills property here to the Georgetown Silk Company, Wilkes-Barre, Pa. The property has been vacant for the past eight years.

The Wilkes-Barre Company has begun the movement of throwing machinery here and operations will get under way within the next two months,

The company will employ 60 people to begin with, but

later full operation will require 300.

A. H. Carr, president of the Durham Hosiery Mills, also made known the purchase of three additional high speed full-fashioned hosiery machines for delivery during July.

The July Textile Research

An outline program for the research on textile drying, which U. S. Institute for Textile Research is engaged in financing, is published in the July issue of that organization's magazine, Textile Research. "The ultimate goal for this work," it states, "is to provide sufficient information so that any kind of textile material can be dried with maximum speed and economy, but with minimum damage to the quality of the product." A fund of \$5,000 is needed for this study and subscriptions of \$100 each are sought, this sum qualifying co-operators to receive confidential progress reports of the study, and also gives them contributing membership in the Institute at no extra charge. Only 30 per cent of the fund has been subscribed thus far, although the 150 textile men who attended the conference in May on this subject voted unanimously to have U. S. Institute undertake the financing and conduct of the project.

Other noteworthy features of the July Textile Research are the report of a study of "The Retentivity of Water by Purified Cellulose," by Homer A. Hamm and Prof. W. A. Patrick, and the summary of a basic research on the properties of starches reprinted from the Journal of the Textile Institute (England). The latter study was conducted at the Shirley Institute of the British Cotton Industry Research Association by Richardson, Higgin-botham and Farrow and is entitled "The Reducing Power and Average Molecular Chain-length of Starch and Its Hydrolysis Products, and the Constitution of Their Aqueous Pastes."

150 to



No bale tie is any stronger than its sealed joint.

The improved Stanley Sealer is designed so that one pound pressure on the handles develops 150 pounds pressure at the crimping head.

It is impossible to make a smoother or stronger sealed joint.

Here are a few reasons why many mills specify the Stanley Bale Tie System:

Smooth Safety Edges
Smooth Safety Ends
Rust-resisting Japanned Finish
Exceedingly strong Sealed Joints
that lie perfectly flat
Stanley Sealer gives Super-Pressure

Let us demonstrate the truth of these facts

THE STANLEY WORKS New Britain, Conn.

Atlanta Office:
THE STANLEY WORKS SALES CO.
552 Murphy Avenue
Atlanta, Ga.

Carolina's Representatives CORRY LYNCH P. O. Box 1294 Charlotte, N. C.

STANLEY BALE TIE SYSTEM
TIES - - - SEALS - - - SEALERS

Summer Meeting and Outing Piedmont Section, A. A. T. C. C.

(Continued from Page 11)

Mr. and Mrs. Foster, Rock Hill, S. C. John Frey, LaFrance, S. C. Mr. and Mrs. Gaddy, Durham, N. C. Henry Gaede, Philadelphia, Pa. John Gardner, Charlotte, N. C. Miss Evelyn Garrison, Travelers Rest, S. C. J. T. Gillespite, Charlotte, N. C. J. T. Gillespite, Charlotte, N. C.
Mr. Ginter, Charlotte, N. C.
Mr. and Mrs. Wm. Goldsmith, Jr., Travelers Rest, S. C.
Mr. and Mrs. Harold Goller, Greenville, S. C.
Mr. and Mrs. J. N. Grant, Charlotte, N. C.
Ira L. Griffin, Charlotte, N. C.
Paul Haddock, Charlotte, N. C.
A. T. Hanes, Winston-Salem, N. C.
M. D. Haney, Charlotte, N. C.
Mr. and Mrs. S. L. Hayes, Charlotte, N. C.
Mr. and Mrs. Geo. Howell, Rock Hill, S. C.
Mr. and Mrs. J. D. Hunter, Charlotte, N. C.
Mr. and Mrs. J. Ivey, Charlotte, N. C.
C. R. Johnson, Mooresville, N. C.
Nesbit Johnson, Charlotte, N. C.
Mr. MacDougle, Rock Hill, S. C.
Geo. M. MacKenzie, Charlotte, N. C.
Malcolm MacKenzie, Charlotte, N. C.
R. B. MacIntyre, Charlotte, N. C. R. B. MacIntyre, Charlotte, N. C. Mr. Manley, Fairforest, S. C.
Tom A. Marlowe, High Point, N. C.
Mr. and Mrs. J. Martin, Hartsville, S. C.
Miss Lorraine Mellon, Belmont, N. C. Miss Lorraine Mellon, Belmont, N. C.
H. A. Metz, New York City.
Mr. and Mrs. Grady Miller, Hickory, N. C.
W. C. Mills, Cleveland, S. C.
Mr. and Mrs. R. M. Mitchell, Greensboro, N. C.
Mr. and Mrs. Wm. Molhar, Roanoke Rapids, N. C.
Mr. and Mrs. Moore, Lyman, S. C.
Mr. and Mrs. J. T. Moore, Charlotte, N. C.
J. E. Moore, Charlotte, N. C.
Guy L. Morrison, Spartanburg, S. C. Guy L. Morrison, Spartanburg, S. C. Cliff Myers, Charlotte, N. C. Chif Myers, Charlotte, N. C.
John Neely, Burlington, N. C.
John S. Neely, Gastonia, N. C.
D. C. Newman, Charlotte, N. C.
D. B. Norton, Charlotte, N. C.
Mr. and Mrs. Joe Okey, Graham, N. C.
J. N. Parker, Jr., Atlanta, Ga.
S. I. Parker, Atlanta, Ga. W. R. Patton, Durham, N. C. Cecil Perkins, Lynchburg, Va. G. C. Perkins, Springfield, Mass, S. A. Pettus, Charlotte, N. C. W. I. Pickens, Charlotte, N. C. Mr. and Mrs. Pickler, Greenville, S. C. Mr. Ald Mrs. Fieldale, Va.
Mr. Pierce, Charlotte, N. C.
T. A. Printon, Harrison, N. J.
Mr. and Mrs. Hugh Puckett, Charlotte, N. C. Mr. Quern, Charlotte, N. C R. L. Rhoades, Charlotte, N. C. R. L. Rhoades, Charlotte, N. C.
Mrs. W. J. Richard, Concord, N. C.
Miss Ola Richardson, Charlotte, N. C.
Irving Royce, Charlotte, N. C.
J. D. Sandridge, Charlotte, N. C.
Mr. Scholler, Philadelphia, Pa.
J. M. Sharpe, Concord, N. C.
W. M. Slateworthy, Ware Shoals, S. C.
R. D. Sloan, Greenville, S. C.
W. G. Sloan, Newton, N. C.
B. F. Smith, Charlotte, N. C.
Gillespie Smith, Chartanooga, Tenn. B. F. Smith, Charlotte, N. C.
Gillespie Smith, Charlotte, N. C.
Gillespie Smith, Charlotte, N. C.
Mr. and Mrs. R. H. Smith, High Point, N. C.
Junius M. Smith, Charlotte, N. C.
Mr. and Mrs. T. R. Smith, Albemarle, N. C.
W. D. Smith, Atlanta, Ga.
Mr. and Mrs. Gordon, Spencer, Ware Shoals, S. C.
H. M. Sprock, Charlotte, N. C.
J. W. Stallings, Charlotte, N. C.
Mr. Stonstrom, Lyman, S. C.
Francis Stuart, Belmont, N. C.
R. H. Suddeth, Greensboro, N. C. R. H. Suddeth, Greensboro, N. C. Miss Dorothy Summers, Charlotte, N. C. Miss Frances Summers, Charlotte, N. C.

Mr. and Mrs. F. P. Summers, Charlotte, N. C. Mr. Summers, Charlotte, N. C. R. E. Sumner, Plainfield, N. J. C. G. Swain, Lexington, N. C. Mr. Symmes, Statesville, N. C. Fred O. Tilson, Charlotte, N. C. Mr. and Mrs. A. R. Thompson, Charlotte, N. C. Mrs. Marie Tyson, Mebane, N. C. Nick Vieria, Charlotte, N. C. Mr. Wagstaff, Huntersville, N. C. C. P. Walker, Charlotte, N. C. Mr. and Mrs. Erwin Walker, Charlotte, N. C. Mr. and Mrs. Erwin Walker, Concord, N. C. Mr. Wilson, High Point, N. C. Robert Young, Spartanburg, S. C. Mr. and Mrs. J. H. Zahn, Charlotte, N. C.

Notes On Cotton-Warp Sizing

(Continued from Page 13)

construction of the yarn, the speed of the slasher, amount of immersion of the yarn in the size-bath, the weight and condition of the squeeze rolls, and the rate and method of drying. The penetration is greater the higher the degree of dispersion of the starch in the size and the lower the viscosity of the sizing mixture.

Degree of Penetration.—It is claimed that penetration is only desirable to the extent sufficient to favor a good anchorage of the film around the warp, rather than to make a rod-like brittle warp, which would lack resiliency and elasticity. The aims of the sizing process should be to paste down the fibers protruding from the body of the unsized yarn; to fill the valleys on the surface of this yarn; to form a tough, elastic flexible film around the yarn; and for the film to penetrate far enough towards the center to be well anchored. This would result in a smooth heddle and reed action. The much-sought-after quality of elasticity is probably not present in a yarn in which size has penetrated to the very core and surrounded every fiber, while it could well be present where the yarn is merely coated with the size. On the other hand, it is stated that the size must penetrate sufficiently or the size will shed.

(To be continued)

OBITUARY

O. G. HUNTER

Griffin, Ga.—O. C. Hunter, for more than 20 years outside foreman for the Georgia-Kincaid Mills Nos. 2, 3 and 5, died at his home here after an illness of several months.



5,000-Acre Tract For Operatives' Farms

Spray, N. C.—Announcement is made here that a 5,000-acre tract of land adjoining the fourteen textile manufacturing plants in the Spray-Leaksville section will be cut into small tracts and offered for sale to the mill operatives on long-time terms following the construction of dwellings on the lots. It is understood that the project will represent an expenditure of \$250,000.

For the preliminary work on this industrial project an expenditure of \$5,000 has been approved by the Resettlement Administration, it has been announced. This project will enable the operatives of textile plants in this section to be able to purchase their homes and at the same time to own enough land to produce a good part of their food, working these plots while they have spare time from their duties at the mill.

Murchison Urges Japanese Quota

Anniston, Ala.—Establishment of a quota system to regulate Japanese imports and protect the American textile industry from the "menace of cheap Oriental labor," was advocated here by Dr. Claudius T. Murchison, president of the Cotton-Textile Institute, who was in the city to attend a meeting of the Alabama Cotton Manufacturers' Association.

Dr. Murchison added that Japanese imports could not be regulated by imposing high tariffs without "completely cutting off textile trade with other nations. I submit then that we must establish a quota for Japanese textile imports, and it is to this end that we will strive in the next Congress."

Lease Print Rollers

Charleston, S. C.—In an order filed in United States District Court here June 27th, following a hearing some two weeks ago, Federal Judge J. Lyles Glenn authorized the Hartsville Print & Dye Works of Hartsville, S. C., which some time ago filed a petition for reorganization under Section 77-B of the Bankruptcy Act, to enter into lease with the United States Finishing Company for 253 copper rollers. It is understood the latter concern owns 9,000 of the 15,000 outstanding shares of common stock of the Hartsville Print & Dye Works.

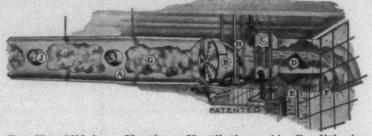
SANITARY LUNCH SERVICE

Furnished mills on a percentage and lease basis. Competent and profitable arrangements made to suit your particular plant. Communicate with us at once for complete details.

COMMISSARY SERVICE COMPANY 22 West 48th Street, New York

THE MOST MODERN EQUIPMENT FOR THE TEXTILE INDUSTRY

The Bahnson Humiduct



For Humidifying—Heating—Ventilating—Air Conditioning
ALL IN ONE UNIT

Air Conditioning in industry is growing in importance because of its effect on people, products and profits. It must be considered as one of the essential tools of modern plant operation.

THE BAHNSON COMPANY, WINSTON-SALEM, N. C. SALES ENGINEERS:

S. C. STIMSON Winston-Salem, N. C. I. L. BROWN 886 Drewery St., N.E. Atlanta, Ga. F. S. FRAMBACH 703 Embree Crescent Westfield, N. J. D. D. SMITH 314 W. South St. Kalamazoo, Michigan

What the Well Dressed

Bale Wears

Signede Dependon Bale

It is strapped with Signode Dependon Bale Ties. The clean, rust-proof, smooth finish of the strapping makes it possible to handle the strapping makes it possible to handle contents of the bale without soiling. Its safe contents of the hands of the operator. The edges protect the hands of the operator. The Signode joint (which holds overlapping strap Signode joint (which holds overlapping strap ends) has a tensile strength of approximately the tensile strength of the strap itself. Also other grades of Signode Strapping for reinother grades of Signode Strapping for Textile Shipments. Tensional Box Strapping for Textile Shipments.

SIGNODE STEEL STRAPPING CO.

2638 N. Western Avenue, Chicago

373 Furman Street Brooklyn, N. Y. 456 Bryant Street San Francisco, Calif.

SELLING AGENTS for SOUTHERN COTTON GOODS

Deering, Milliken & Co.

Incorporated

79-83 Leonard Street

New York

99 Chauncey St., Boston 223 Jackson Blvd., Chicago

CURRAN & BARRY

320 Broadway

New York, N. Y.

Neisler Mills Co., Inc.

Selling Agents

66-68 Worth St.

New York

Wellington, Sears Company

93 Franklin St., Boston

65 Worth St., New York

Philadelphia

Obloana

Atlanta

New Orleans

San Francisco

DOMESTIC

EXPORT

MERCHANDISING
JOSHUA L. BAILY & CO.

10-12 THOMAS ST., NEWYORK

Cotton Goods Markets

New York.—The cotton goods markets were not as active last week as active last week as for the previous two weeks, but business continued on a very good basis and the market is much stronger than it was a month ago. Sales of print cloths were considerably lighter, but narrow sheetings were more active and sales were estimated as being as large as production. The total business in print cloths for June is estimated at at least twice the production for that period.

There was a much better demand for drills, twills, sateens and some of the combed yarn constructions.

Most print cloths were unchanged but some odd widths advanced ½ cent. Carded broadcloths were unchanged to higher. Rather general advances were made in narrow sheetings after large sales. Drills also were higher.

Statistically the fine goods market is in a position to gradually raise prices on a variety of constructions. This was made all too evident in the case of combed broadcloth. Sales had gone through of 136x60s and 128x68s at 10½c to wanted makes and 10c for goods was questioned at the close. It was usual to report the low on these goods was 10¼c. The situation in the case of 144x76s showed they are more generally from 12¼c to 12½c, these prices having been paid during the closing hours of last week. It was estimated that 1,500,000 yards of broadcloths sold, the lower counts being of principal interest. Buyers were sometimes minded to prepare for Government and other special business.

During the week there were large sales of men's colored shirting on contract. Since mills are sold up into late September and early October a number of contracts called for deliveries starting then. It was estimated they were on the basis of 12½c to 13c for 38-inch 80x76s over all with pastel colors. There were higher priced shirtings ordered in amounts of several hundred pieces for jac-

quards and fine box loom types.

One of the strongest rayon divisions is reported to be the taffetas. By the close of the week several mills were in process of raising the lower counts, those under 39-inch 72x48s, a matter of ¼c. They had begun that process and the step involves being advanced ½c from the low of a week ago.

Print cloths, 27-in., 64x60s3	15-16
Print cloths, 28-in., 64x60s	4
Gray goods, 38½-in., 64x60s	51/2
Gray goods, 39-in., 80x80s	71/2
Gray goods, 39-in., 68x72s	63/8
Brown sheetings, 3-yard	
Tickings, 8-ounce	15
Denims	13
Brown sheetings, 4-vard, 56x60s	7

J. P. STEVENS & CO., INC.

Selling Agents

40-46 LEONARD ST., NEW YORK

Cotton Yarn Markets

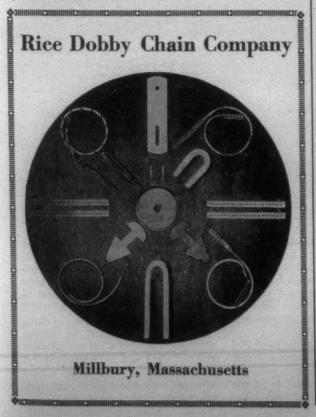
Philadelphia, Pa.—The yarn market was more active and prices were advanced further during the past week. The advances were from a half to a full cent and a half per pound. The demand for two weeks has been larger than at any time this year. The higher prices for raw cotton have been a decided factor in stimulating business in yarns. Spinners of combed and high quality carded yarns report that they are having much trouble in getting supplies of suitable cotton and are predicting that the wanted grades will be in very short supply before the summer if needed.

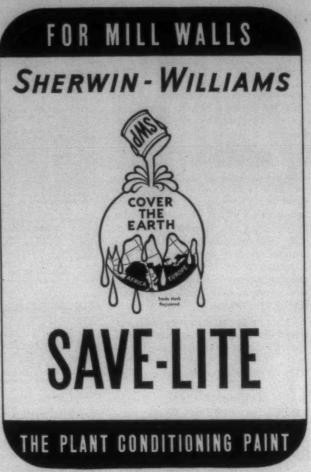
The better business has put spinners in a much stronger position and they are now more independent in accepting new business. Most of the mills are well supplied with orders for some weeks to come and are not willing to consider prices at which business was placed a month

A fair number of buyers have taken large orders recently and are supplied with yarns they need for some weeks to come. However, the market is not considered overbought by any means and most market factors look for a continuance of the present good business.

The demand for mercerized has shown substantial improvement and prices were advanced last week from 1 to 3 cents a pound.

Customers who last month covered their yarn requirements beyond Labor Day, this week are back again to cover further ahead for periods ranging from the middle of October to the end of this year. In addition, some customers who for months have been buying piecemeal are now covering three months ahead, and still are keeping in contact with the markets on the theory that additional purchases could be made to advantage if they discovered some weak sellers who could be depended on to ship the yarn when the time comes at the prices sought by these customers.







5 CUTS

6 REDUCES

7 SAVES OH

8 GIVES

in PROCESSING and FINISHING!

These unique compounds bring marked improvement to Throwing, Bleaching, Dyeing, Printing and Finishing, on all fabrics. They reach the point of complete sulphonation, having three times the SOs content of average oils. Will not break under any conditions of use. No undissolved particles to spot or streak. Thorough cleansing, level dyeing. Finish is rich, full-bodied and penetrated.

Made in four types for all needs. Write in detail, for proper sample and informa-

Onyx Oil & Chemical Co.

Specialists on Finishing Materials

Jersey City, N. J.

Southern Repr., E. W. Klumph, Charlotte, N. C. Midw. Repr., Maher Color & Chem. Co., Inc., Chicago

Mills Pay Quarterly Dividend

Greenville, S. C.—Three more mills of Greenville or with headquarters here have voted dividends to be paid July 1st, giving a total of over \$160,000 to be paid this week to stockholders.

Union-Buffalo Mills of Union, S. C., of which Fred W. Symmes of Greenville is president, will pay \$32,900 as a \$1.25 a share quarterly dividend on preferred stock, Mr. Symmes announced. Victor Monaghan Mills, headed by T. M. Marchant of Greenville, will pay about \$10,000 as a regular dividend on preferred stock. Directors of Southern Weaving Company of Greenville last week authorized payment of a dividend amounting to \$10,000.

Other mills that had previously declared dividends payable July 1st follow: Piedmont Manufacturing Company, \$64,000; Dunean Mills, \$10,000; Wallace Manufacturing Company of Jonesville, headed by W. H. Beattie of Greenville, \$4,500; Southern Bleachery and Print Works, Inc., Taylors, S. C., \$42,000.

Says More Cotton Used Under Process Tax

Washington.—The consumption of cotton by American mills averaged higher during the period when the processing tax was in effect than in the preceding four years, and the tax added only a small percentage to the retail price of cotton goods, and that with little consumer resistance, it is asserted in a report of the administration of the Agricultural Adjustment Act for the years 1933-1935 by Chester Davis, administrator.

The average annual consumption of cotton by American mills for the five-year period 1925-1929 was 3,-293,400,000 pounds, according to the report. For the four-year period 1930-1933 the average per annum decreased to 2,694,000,000 pounds. During the calendar years 1934 and 1935, it was stated, when the processing tax was in effect, the consumption averaged 2,702,800,000 pounds, slightly more than the annual average consumption during the preceding years.

The report continued:

"In 1935 the market for products of the major textile fibers expanded and the consumption of cotton, rayon, silk, wool, and jute each increased. Consumption of cotton was 3.4 per

Index To Advertisers

Where a — appears opposite a name it indicates that the advertisement does not appear in this issue.

Page	Johnson, Chas. B. Page
^	Johnson, Chas. B.
Abbott Machine Co. ———————————————————————————————————	Keever Starch Co
Allis-Chalmers Mfg Co	_1_
American Blower Co. 7	Laurel Soap Mfg. Co., Inc
	Lindley Nurseries, Inc.
American Moistening Co	Link-Belt Co
American Moistening Co. — American Paper Tube Co. — Armstrong Cork Products Co. — Arnold, Hoffman & Co., Inc. — Ashworth Brose	-M-
Armstrong Cork Products Co	Maguire, John P. & Co.
Ashworth Bros.	Manhattan Rubber Mfg. Div. of Ray-
	Maguire, John P. & Co. Manhattan Rubber Mfg. Div. of Raybestos Manhattan, Inc., The Murray Laboratory 23
Bahnson Co19	Murray Laboratory 23
Bahnson Co. 19 Baily, Joshua L. & Co. 20 Barber-Colman Co. — Borne, Scrymser Co. — Brookmire, Inc. — Brown, David Co. — Brown, D. P. & Co. — Butterworth, H. W. & Sons Co. — Back Cover	_N_
Barber-Colman Co	National Aniline & Chemical Co., Inc
Borne, Scrymser Co	National Ring Traveler Co. 10
Brown David Co	Neisler Mills, Inc. 20
Brown D P & Co	N. Y. & N. J. Lubricant Co. Front Cover
Butterworth, H. W. & Sons Co.	National Aniline & Chemical Co., Inc. — National Oil Products Co. National Ring Traveler Co. 10 Neisler Mills, Inc. 20 N. Y. & N. J. Lubricant Co., Front Cover Noone, Wm. R. & Co. Norma-Hoffmann, Bearings, Corp.
Back Cover	Norlander Machine Co16
-c-	Atomic Atomic Dearings Corp.
Campbell, John & Co. — — — — — — — — — — — — — — — — — — —	Old Dominion Box Co. Inc.
Campbell, John & Co. — — — — — — — — — — — — — — — — — — —	Old Dominion Box Co., Inc. —— Onyx Oil & Chemical Co. —— Orkin Exterminating Co. ——
Charlotte Chemical Laboratories, Inc. —	Orkin Exterminating Co
Charlotte Chemical Laboratories, Inc. — Charlotte Leather Belting Co. — Chicago Mill & Lumber Co. —	
Ciba Co. Inc.	Parks-Cramer Co
Clark Publishing Co.	Parks-Cramer Co. — — — — — — — — — — — — — — — — — — —
	Rhoads, J. E. & Sons
Commercial Factors Corp. Corn Products Refining Co. Crompton & Knowles Loom Works Curran & Barry Cutler, Roger W.	Rhoads, J. E. & Sons
Crownton & Knowles Loom Works	Rice Dobby Chain Co 21
Curran & Barry 20	Case Templi Chang
Cutler, Roger W	Saco-Lowell Shops
and a second control of the control	Seydel-Woolley Co.
Dary Ring Traveler Co	Sherwin-Williams Co 21
Dary Ring Traveler Co. Daughtry Sheet Metal Co. Deering, Milliken & Co., Inc. 20 Dillard Paper Co. Dixon Lubricating Saddle Co.	Signode Steel Strapping Co 19
Deering, Milliken & Co., Inc 20	Sipp-Eastwood Corp.
Dillard Paper Co10	Solvel Corn
Draper Corporation	Sonoco Products
Dronsfield Bros	Southern Ry
Dunkel & Co., Paul R. 23	Southern Spindle & Flyer Co
Dunning & Boschert Press Co 10	Sperry, D. R. & Co.
Draper Corporation — Draper Corporation — Dronsfield Bros. — Dunkel & Co., Paul R. Dunning & Boschert Press Co. 10 DuPont de Nemours, E. I. & Co. —	Stanley Works
	Steel Heddle Mfg. Co
Eaton, Paul B. 23 Emmons Loom Harness Co. — Engineering Sales Co. — Enka, American —	Stein, Hall & Co
Engineering Sales Co.	Sterling Ring Traveler Co16
Enka American	Stevens, J. P. & Co., Inc20
	Stone Chee H Inc
Foster Machine Co	Swan-Finch Oil Corp16
Foster Machine Co. Benjamin Franklin Hotel Franklin Process Co.	Sonoco Products
Franklin Process Co	Terrell Machine Co.
Garland Mfg. Co. 10 General Dyestuff Corp. — General Electric Co. — General Electric Vapor Lamp Co. — Georgia Webbing & Tene. Co. —	Texas Co., The
Cananal Duagtue Com	Textile Banking Co.
General Electric Co	Textile Shop, The
General Electric Vapor Lamp Co	TY & Bobbin & Shuttle Co
Georgia Webbing & Tape Co	U. S. Gutta Percha Paint Co.
Gill Leather Co.	U. S. Ring Traveler Co
Georgia Webbing & Tape Co. — Gill Leather Co. — Goodyear Tire & Rubber Co. — Grasselli Chemical Co., The — Graton & Knight Co. — Greenville Belting Co. — Gulf Refining Co. —	U. S. Bobbin & Shuttle Co. — U. S. Gutta Percha Paint Co. — U. S. Ring Traveler Co. — Universal Winding Co. —
Graton & Knight Co.	
Greenville Belting Co	Vanderbilt Hotel
Gulf Refining Co	Veeder-Root, Inc.
-H-	Vanderbilt Hotel Veeder-Root, Inc. Victor Ring Traveler Co. Viscose Co. Vogel, Joseph A. Co. 27
H & B American Machine Co 2	Vogel, Joseph A. Co27
Hercules Powder Co. — Hermas Machine Co. — Houghton, E. F. & Co. — Houghton Wool Co. 23 Howard Bros. Mfg. Co. —	-W-
Hermas Machine Co.	Washburn Printing Co.
Houghton Wool Co.	Wellington, Sears Co20
Howard Bros. Mfg. Co.	Whitinguille Spinning Ping Co.
5 (20 10 10 10 10 10 10 10 10 10 10 10 10 10	Williams I B & Sons
Jacobs, E. H. Mfg. Co., Inc	Washburn Printing Co.

cent greater in 1935 than in 1934; consumption of rayon, 29.2 per cent greater; silk, 7.7 per cent greater; wool, 81.3 per cent greater; and the consumption (imports) of jute was 25.4 per cent greater.

The increase in 1935 as compared with 1934 in the consumption of rayon was a reflection of the growing use of rayon and a continuation of the trend of the past several years. In-

creases in the apparent consumption of silk and wool appear to have been little more than the replenishment of supplies following a year in which sales were unusually low. Taking silk and wool together the annual average consumption for the calendar years of 1934 and 1935 was only 2.8 per cent greater than their annual average consumption for the four years from 1930 through 1933.

Classified Department

WANTED—One Overseer of Weaving with experience on 4 x 1 Box. Dobby and Cam Looms, K Dobby Looms and Plain Two Harness Looms. Prefer man with experience, not over 35 years of age. "Experience," care Textile Bulletin.

WANTED—Position as Superintendent of Plain Weaving or Yarn Mill. Married, age 42. Overseer and superintendent more than 18 years. Start with small salary. Will call my expense to see mill. Very best of references. Address "S. G. D.," care Textile Bulletin.

YOUNG MARRIED MAN, textile education, ten years practical experience, desires position as superintendent, or as overseer carding or spinning. Excellent references. Employed at present. Address "Confidential," care Textile Bulletin.

WANTED

By old established house in New York a mill of 400 to 600 looms making sheetings 38% to 42 inches that is not being operated profitably. Finances can be arranged for changing over to profitable goods. Reply "Established," care Textile Bulletin.

MURRAY LABORATORY

Chemist and Bacteriologist
Analytical and Consulting.
Sanitary, industrial and boiler water
analyses, sixing compounds, oils and
general analyses.
17 years experience
21 W. McBee Ave. Greenville, S. C.

Paul B. Eaton

1408 Johnston Bidg., Charlotte, N. C. 514 Munsey Bidg., Washington, D. C. Former Member Examining Corps U. S. Patent Office G. A. WHITE & CO., Sou. Rep.
International Moistening Co.
Jackson Moistening Co.
Foxboro Humidity Controls
Pumps, Compressor, Used
Humidifiers

Box 533

Charlotte, N. C.

Ten New Colors For Fall Hosiery

The regular edition of the 1936 Fall Hosiery Card has been released to members of the Textile Color Card Association, it was announced. This card, which portrays ten colors, is issued by the color organization in cooperation with the National Association of Hosiery Manufacturers.

Following the format of last season, the colors are shown on flesh-colored horizontal tabs having three layers of silk hosiery material. For merchandising purposes a description and full co-ordination notes are printed below each color, indicating the proper tie-up of the hosiery shades with the outstanding new color movements in fall costumes and shoes.

As previously announced, when the confidential advance hosiery card was issued several weeks ago, the ten fall hosiery colors are burnt ochre, burnt copper, leather tan, cinnamon brown, cafe clair, tailleur brown, debonair, jaunty, saunter, smokestone.

Hosiery Employment Up

Hickory, N. C.—The growth of rayon and hosiery industries in North Carolina have been more rapid during the past year than other kinds of manufacturing. R. L. Huffman, Jr., manager of the Hickory office of the North Carolina employment service, said, according to statistics compiled by the officials of the employment service. The local employment service officials stated that the statistics revealed the growth of the two industries is attributed to expansion of mills and production and not to the building of additional mills.

English Sparrows Are Rayon Users

Enka, N. C.—Lowly English sparrows are ornothological aristocrats at Enka. They build their nests with rayon.

Employees of the American Enka Corporation report that it is no uncommon sight to see an English sparrow flying out of one of the plant departments, or across the grounds with a long rayon string in his mouth. Nests have been found in the Enka village fabricated almost entirely from white rayon manufactured in the plant. The nests are easily spotted in trees and under eaves.

Make Awards For Cotton Mats for Roads

Washington.—Awards on 89,535



ARABIC KARAYA (Indian Gum)

TRAGACANTH

VEGETABLE GUM

(Locust Bean Gum)

Let us quote you on your requirements

PAUL A. DUNKEL & COMPANY INC.
82 WALL STREET NEW YORK, N.Y.

BARRETT
Specification
ROOFING
DAUGHTRY
SHEET METAL CO.
1109 E. Trade Charlotte

JAMES E. TAYLOR
CHARLOTTE, N. C.
For Standard
WOOL TOPS
HOUGHTON WOOL CO.
253 Summer St.
Boston, Mas

cotton mats for use in road building, bids on which were opened by the Commodity Purchasing Section, AAA, here Tuesday, were made.

The Advanced Concrete Road Curing Company, New Haven, Conn., received the award on all of the mats except the 22½-foot lengths, of which 31,520 went to the Taylor Bedding Company, Taylor, Tex.

Southern Sources of Supply

For Equipment, Parts, Material, Service

Following are the addresses of Southern plants, warehouses, offices, and representatives of manufacturers of textile equipment and supplies who advertise regularly in TEXTILE BULLETIN. We realize that operating executives are frequently in urgent need of information service, equipment, parts and materials, and believe this guide will prove of real value to our subscribers.

ABBOTT MACHINE CO., Wilton, N. H. Sou. Agt., L. S. Ligon, Greenville, S. C.

AKRON BELTING CO., Akron, O. Sou. Branches, 209 Johnston Bldg., Charlotte, N. C.; 905 Woodside Bldg., Greenville, S. C.; 20 Adams Ave., Memphis, Tenn.

C.; 20 Adams Ave., Memphis, Tenn.

ALLIS-CHALMERS MFG. CO., Milwaukee, Wis. Sou. Sales Offices: Atlanta, Ga., Healey Bldg., Berrien Moore, Mgr.; Baltimore, Md., Lexington Bldg., A. T. Jacobson, Mgr.; Birmingham, Ala., Webb Crawford Bldg., John J. Greagan, Mgr.; Charlotte, N. C., Johnston Bldg., William Parker, Mgr.; Chattanooga, Tenn., Tennessee Electric Power Bldg., D. S. Kerr, Mgr.; Clincinnati, O., First National Bank Bldg., W. G. May, Mgr.; Dallas, Tex., Santa Fe Bldg., E. W. Burbank, Mgr.; Houston, Tex., Shell Bldg., K. P. Ribble, Mgr.; New Orleans, La., Canal Bank Bldg., F. W. Stevens, Mgr.; Richmond, Va., Electric Bldg., C. L. Crosby, Mgr.; St. Louis, Mo., Rallway Exchange Bldg., C. L. Orth, Mgr.; San Antonio, Tex., Frost National Bank Bldg., Earl R. Hury, Mgr.; Tampa, Fla., 415 Hampton St., H. C. Flanagan, Mgr.; Tulsa, Okla., 18 North Guthrie St., D. M. McCargar, Mgr.; Washington, D. C., Southern Bldg., H. C. Hood, Mgr.

AMERICAN CYANAMID & CHEMICAL CORP., 30 Rockefeller Plaza, New York City. Sou. Office and Warehouse, 301 E. 7th St., Charlotte, N. C., Paul Haddock, Sou. Mgr.

7th St., Charlotte, N. C., Paul Haddock, Sou. Mgr.
AMERICAN ENKA CORP., 271 Church St., New York City.
Sou. Rep., R. J. Mebane, Asheville, N. C.
AMERICAN MOISTENING CO., Providence, R. I. Southern
plant, Charlotte, N. C.
AMERICAN PAPER TUBE CO., Woonsocket, R. I. Sou. Rep.,
Ernest F. Culbreath, P. O. Box 11, Charlotte, N. C.
ARMSTRONG CORK PRODUCTS CO. (Textile Division),
Lancaster, Pa. Sou. Office, 33 Norwood Place, Greenville, S. C.
T. L. Hill.

ARNOLD, HOFFMAN & CO., Inc., Providence, R. I. Frank W. Johnson, Sou. Mgr., Box 1268, Charlotte, N. C. Sou. Reps., Robert E. Buck, Box 904, Greenville, S. C.; Harold T. Buck, 1615 12th St., Columbus, Ga.; W. Chester Cobb, Hotel Russell Erskine,

12th St., Columbus, Ga.; W. Chester Cobb, Hotel Russell Erskine, Huntsville, Ala.

ASHWORTH BROS., Inc., Charlotte, N. C. Sou. Offices, 44-A
Norwood Place, Greenville, S. C.; 215 Central Ave., S.W., Atlanta, Ga.; Texas Rep., Textile Supply Co., Dallas, Tex.

ATLANTA HARNESS & REED MFG. CO., Atlanta, Ga. G. P.
Carmichael, Atlanta Office; Alabama, Georgia and Mississippi
Rep., Barney R. Cole, Atlanta Office; North Carolina and South
Carolina Rep., Dave Jones, Greenville, S. C. Worth and South

Carolina Rep., Dave Jones, Greenville, S. C.

BAHNSON CO., THE, Winston-Salem, N. C. North and South
Carolina Rep., S. C. Stimson, Winston-Salem, N. C. Sou. Rep.,
I. L. Brown, 836 Drewery St. N.E., Atlanta, Ga. Northern Rep.,
F. S. Frambach, 703 Embree Crescent, Westfield, N. J. Western
Rep., D. D. Smith, 814 W. South St., Kalamazoo, Mich.

BARBER-COLMAN CO., Rockford, Ill. Sou. Office, 31 W. cBee Ave., Greenville, S C., J. H. Spencer, Mgr.

BARBER-OLIMIA BARBER ST. J. H. Spencer, Mgr. McBee Ave., Greenville, S. C., J. H. Spencer, Mgr. BORNE, SCRYMSER CO., 17 Battery Place, New York City. Sou. Mgr., H. L. Siever, P. O. Box 1169, Charlotte, N. C. Sales Reps., W. B. Uhler, 608 Palmetto St., Spartanburg, S. C.; R. C. Young, Jefferson Apts., Charlotte, N. C.; John Ferguson, 303 Hill St., LaGrange, Ga.

BROWN CO., DAVID, Lawrence, Mass. Sou. Reps., Ralph Gossett, Woodside Bidg., Greenville, S. C.; William J. Moore, Woodside Bidg., Greenville, S. C.; Belton C. Plowden, Griffin, Ga.; Gastonia Mill Supply Co., Gastonia, N. C.; Russell A. Singleton, Dallas, Tex.; S. Frank Jones, 209 Johnston Bldg., Charlotte, N. C.; J. Richard Plowden, 421 10th Ave., West, Birmingham, Als.

BROWN & CO., D. P., Philadelphia, Pa. Sou. Rep., N. W.

CAMPBELL & CO., JOHN, 75 Hudson St., New York City. Sou. Reps., M. L. Kirby, P. O. Box 432, West Point, Ga.; Mike A. Stough, P. O. Box 701, Charlotte, N. C.; A. Max Browning, Hillsboro, N. C.

CAROLINA REFRACTORIES CO., Hartsville, S. C. CHARLOTTE CHEMICAL LABORATORIES, Inc., Charlotte,

CHARLOTTE LEATHER BELTING CO., Charlotte, N. C. CHICAGO MILL & LUMBER CO., 614 Johnston Bidg., Charlotte, N. C. Sales Staff, E. J. Mueller, C. P. Semmlow. Executive Offices, 111 W. Washington St., Chicago, Ill. Plants at: Plymouth, N. C., Helena, Ark., Greenville, Miss., Tallulah, La., Chicago, Ill.

CIBA CO., Inc., Greenwich and Morton Sts., New York City, ou. Offices and Warehouse, Charlotte, N. C.

Sou. Offices and Warehouse, Charlotte, N. C.
CLINTON CO., Clinton, Iowa. Sou. Reps., Luther Knowles,
Jr., P. O. Box 127, Charlotte, N. C.; T. LeRoy Smith, Box 654,
Tel. 2-3921, Charlotte, N. C. Clinton Sales Co., Inc., Byrd Miller, Grady Gilbert, 2 Morgan Bidg., Greenville, S. C.; C. Lee
Gilbert, 130 High Point Rd., Box 481, Spartanburg, S. C.; A. C.
Boyd, 1071 Bellevue Drive N.E., Tel. Hem. 7055, Atlanta, Ga.
Stocks carried at Carolina Transfer & Storage Co., Charlotte,
N. C., Consolidated Brokerage Co., Greenville, S. C., Atlanta
Service Warehouse Co., Atlanta, Ga.
COMMERCIAL FACTORS CORP., 2 Park Ave., New York
City. Bou. Rep., T. Holt Haywood, Reynolds Bidg., WinstonSalem, N. C.

White, Mgr.; Corn Products Sales Co., Montgomery Bldg., Spartanburg. S. C., J. Canty Alexander, Asst. Sou. Mgr.; Corn Products Sales Co. (Mill and Paper Starch Div.), Hurt Bldg., Atlanta, Ga., C. G. Stover, Mgr.; Corn Products Sales Co., 824-25 N. C. Bank Bldg., Greensboro, N. C., W. R. Joyner, Mgr.; Corn Products Sales Co., Comer Bidg., Birmingham, Ala., L. H. Kelley, Mgr. Stocks carried at convenient points.

ley, Mgr. Stocks carried at convenient points.

CROMPTON & KNOWLES LOOM WORKS, Worcester, Mass. Sou. Plant, Charlotte, N. C.

CUTLER, ROGER W., 141 Milk St., Boston, Mass. Sou. Agents: B. L. Stewart Roller Shop, Laurinburg, N. C.; Dixle Roller Shop, Rockingham, N. C.; A. J. Whittemore & Sons, Burlington, N. C.; The Georgia Roller Covering Co., Griffin, Ga.; Textile Roll Coverings Works, LaGrange, Ga.; East Point Roller Cov. Co., East Point, Ga.; Dixle Roll & Cot Co., Macon, Ga.; Morrow Roller Shop, Albemarie, N. C.; Peerless Roll Covering Co., Chattanooga, Tenn.; Textile Roll & Cot Co., Dallas, Tex.; Greenville Textile Supply Co., Greenville, S. C.; Anniston Roll Covering Co., Anniston, Ala.

DARY RING TRAVELER CO., Taunton, Mass. Sou. Rep., John E. Humphries, P. O. Box 843, Greenville, S. C.; Chas. L. Ashley, P. O. Box 720, Atlanta, Ga.

DAUGHTRY SHEET METAL CO., Charlotte, N. C. DILLARD PAPER CO., Greensboro, N. C., Greenville, S. C.

DILLARD PAPER CO., Greensboro, N. C., Greenville, S. C. Sou. Raps., E. B. Spencer, Box 681, Charlotte, N. C.; Jess Caldwell, East Radford, Va.

DRAPER CORPORATION, Hopedale, Mass. Sou. Rep., E. N. Darrin, Vice-Pres.; Sou. Offices and Warehouses, 242 Forsyth St., S.W., Atlanta, Ga., W. M. Mitchell; Spartanburg, S. C., Clare H. Draper, Jr.

DUNKEL CO., PAUL A., 82 Wall St., New York City DUNKEL CO., PAUL A., 82 Wall St., New York City.
DU PONT DE NEMOURS & CO., Inc., E. I., Dyestuffs Div.,
Wilmington, Del. John L. Dabbs, Mgr.; D. C. Newman, Asst.
Mgr.; E. P. Davidson, Asst. Mgr.—Technical. Sou. Warehouses,
302 W. First St., Charlotte, N. C. Reps., L. E. Green, H. B.
Constable, W. R. Ivey, Charlotte Office; J. D. Sandridge, W. M.
Hunt, 1031 Jefferson Standard Bldg., Greensboro, N. C.; B. R.
Dabbs, John L. Dabbs, Jr., 716 Providence Bldg., Chattanooga,
Tenn.; R. D. Sloan, Amanda Apt., Greenville, S. C.; J. M. Howard, 136 S. Spring St., Concord, N. C.; W. F. Crayton, Dimon
Court Apt., Columbus, Ga.; J. A. Franklin, Augusta, Ga.; Tom
Taylor, Newman, Ga.

Court Apt., Columbus, Ga.; J. A. Franklin, Augusta, Ga.; Tom Taylor. Newman, Ga.

CORN PRODUCTS REFINING CO., 17 Battery Place, New York City. Corn Products Sales Co., Greenville, S. C., John R. DU PONT DE NEMOURS & CO., Inc., E. I., The R. & H. Chemicals Dept., Wilmington, Del. R. M. Levy, Dist. Sales Mgr., 302 W. First St., Charlotte, N. C.

EATON, PAUL B., 213 Johnston Bidg., Charlotte, N. C.

EMMONS LOOM HARNESS CO., Lawrence, Mass. Sou. Rep., George F. Bahan, P. O. Box 581, Charlotte, N. C.

ENGINEERING SALES CO., 601 Builders' Bidg., Charlotte, N. C.

R. C. FRANKLIN PROCESS CO., Providence, R. I. Sou. Plants, Greenville, S. C., and Chattanooga, Tenn.

GENERAL COAL CO., 1019 Johnston Bldg., Charlotte, N. C. C. L. Rowe, Sou. Sales Mgr.; S. P. Hutchinson, Jr., Asst. Sou. Sales Mgr.; Reps., J. W. Lassiter, Grace American Bldg., Richmond, Va.; D. H. R. Wigg, Law Bldg., Norfolk, Va.; W. A. Counts, Law and Commerce Bldg., Bluefield, W. Va.; J. C. Borden, Greensboro, N. C.; H. C. Moshell, Charleston, S. C.; G. P. W. Black, Greenville, S. C.; F. W. Reagan, Asheville, N. C.; H. G. Thompson, Bristol, Tenn.

GENERAL DYESTUFF CORP. 230 Fifth Ave. New York

GENERAL DYESTUFF CORP., 230 Fifth Ave., New York City. Sou. Office and Warehouse, 1101 S. Blvd., Charlotte, N. C., B. A. Stigen, Mgr.

City. Sou. Office and Warehouse, 1101 S. Biva., Charlotte,
B. A. Stigen, Mgr.

GENERAL ELECTRIC CO., Schenectady, N. Y. Sou. Sales
Offices and Warehouses, Atlanta, Ga. E. H. Ginn, Dist. Mgr.;
Charleston, W. Va., W. L. Alston, Mgr.; Charlotte, N. C., E. P.
Coles, Mgr.; Dallas, Tex., L. T. Blaisdell, Dist. Mgr.; Houston.
Tex., E. M. Wise, W. O'Hara, Mgrs.; Oklahoma City, Okla., F.
D. Hathway, B. F. Dunlap, Mgrs. Sou. Sales Offices, Birmingham, Ala., R. T. Brooke, Mgr.; Chattanooga, Tenn., W. O. McKinney, Mgr.; Ft. Worth, Tex., A. H. Keen, Mgr.; Knoxville,
Tenn., A. B. Cox, Mgr.; Louisville, Ky., E. B. Myrick, Mgr.;
Memphis, Tenn., G. O. McFarlane, Mgr.; Nashville, Tenn., J. H.
Barksdale, Mgr.; New Orleans, La., B. Willard, Mgr.; Richmond,
Va., J. W. Hicklin, Mgr.; San Antonio, Tex., I. A. Uhr, Mgr.;
Sou. Service Shops, Atlanta, Ga.; W. J. Selbert, Mgr.; Dallas,
Tex., W. F. Kaston, Mgr.; Houston, Tex., F. C. Bunker, Mgr.

GENERAL ELECTRIC VAPOR LAMP CO., Hoboken, N. J.
Sou. Reps., Frank E. Keener, 187 Spring St., N.W., Atlanta,
Ga.; C. N. Knapp, Commercial Bank Bidg., Charlotte, N. C.
Gilll LEATHER CO., Salem, Mass. Sou. Reps., Russell A.

GILL LEATHER CO., Salem, Mass. Sou. Reps., Russell A. Singleton, Dallas, Tex.; Belton C. Plowden, Griffin, Ga.; Ralph Gossett, Greenville, S. C.; Wm. J. Moore, Greenville, S. C.; W. J. Hamner, Gastonia, N. C.

GILMER CO., L. H., Tacony, Philadelphia, Pa. Sou. Factory Rep., William W. Conrad, Greenwood, S. C. Sou. Mill Supply Distributors: Alabama—Owens-Richards Co., Inc., Birmingham; Southern Bearing & Parts Co., Birmingham; Selma Foundry & Machine Co., Selma. Florida—Llewellwyn Machinery Corp., Miami; Harry P. Leu, Inc., Orlando; Johnston Engineering Corp., St. Petersburg; Southern Pump & Supply Co., Tanpa.

Georgia—Fulton Supply Co., Atlanta; Corbin Supply Co., Macon; Mill & Ship Supply Co., Savannah (formerly John D. Robinson Co. Mississippi—Soule Steam Feed Works, Meridian. North Carolina—McLeod Leather & Belting Co., Greensboro; Odell Mill Supply Co., Greensboro. South Carolina—Greenville Textile Supply Co., Greenville. Tennessee—Rogers-Bulley Hardware Co., Chattanooga; Browning Belting Co., Knoxville; J. E. Dilworth Co., Memphis; Nashville Machine & Supply Co., Nashville. Virginia—Todd Co., Inc., Norfolk; Smith-Courtney Co., Richmond; Johnston Electric Co., Staunton. West Virginia—Central Electric Repair Co., Fairmont.

tral Electric Repair Co., Fairmont.

GOODRICH CO., B. F., 4th and Brevard Sts., Charlotte, N. C. Atlants Dist. Office, 376 Nelson St., S.W., Atlanta, Ga.

GOODYEAR TIRE & RUBBER CO., Inc., The, Akron, O. Sou. Reps., W. C. Killick, 205-207 E. 7th St., Charlotte, N. C.; P. B. Eckels, 141 N. Myrtle Ave., Jacksonville, Fla.; Boyd Arthur, 718-715 Linden Ave., Memphis, Tenn.; T. F. Stringer, 500-6 N. Carrollton Ave., New Orleans, La.; E. M. Champion, 709-11 Spring St., Shreveport, La.; Paul Stevens, 1609-11 First Ave., N. Birmingham, Ala.; B. S. Parker, Jr., Cor. W. Jackson and Oak Sts., Knoxville, Tenn.; E. W. Sanders, 209 E. Broadway, Louis-ville, Ky.; H. R. Zierach, 1225-31 W. Broad St., Richmond, Va.; J. C. Pye, 191-199 Marietta St., Atlanta, Ga.

GRASSELLI CHEMICAL CO., Cleveland, O. Sou. Office and Warehouse, 302 W. First St., Charlotte, N. C.

Warehouse, 302 W. First St., Charlotte, N. C.

GRATON & KNIGHT CO., Worcester, Mass. Sales Reps., R.
W. Davis, Graton & Knight Co., 313 Vine St., Philadelphia, Pa.;
D. A. Ahlstrand, 1271 N. Morningside Drive, Atlanta. Ga.; D. P.
Gordon, Graton & Knight Co., 115 S. 11th St., St. Louis, Mo.;
O. D. Landis, 1709 Springdale Ave., Charlotte, N. C.; P. T.
Pinckney, Jr., 2360 Forrest Ave., Apt. 3, Memphis, Tenn.; H. L.
Cook, Graton & Knight Co., 2615 Commerce St. Dallas. Tex.
Jobbers; Young & Vann Supply Co., Birmingham, Ala.; McGowinLyons Hdwe. & Supply Co., Mobile, Ala.; C. C. Anderson, 301
Woodside Bidg. Annex, Greenville, S. C.; Cameron & Barkley
Co., Charleston, S. C.; Cameron & Barkley Co., Jacksonville,
Fla.; Cameron & Barkley Co., Miamil, Fla.; Cameron & Barkley
Co., Tampa, Fla.; Smith-Courtney Co., Richmond, Va.; TaylorParker, Inc., Norfolk, Va.; Battey Machinery Co., Rome, Ga.;
Columbus Iron Works, Columbus, Ga.; Fulton Supply Co., Atlanta, Ga.; Dallas Beiting Co., Dallas, Tex.; Textile Supply Co.,
Dallas, Tex.; Textile Mill Supply Co., Charlotte, N. C.; KeithSimmons Co., Nashville, Tenn.; Lewis Supply Co., Memphis,
Tenn.; Lewis Supply Co., Helena, Ark.; Southern Supply Co.,
Jackson, Tenn.; E. D. Morton & Co., Louisville, Ky.; Standard
Supply & Hdwe, Co., New Orleans, La.
GREENVILLE BELTING CO., Greenville, S. C.

GREENVILLE BELTING CO., Greenville, S. C.
GREENSBORO LOOM REED CO., Box 1375. Greensboro, N.
C. Phone Greensboro 5071 collect. Geo. A. McFetters, Pres. and
Mgr.; Geo. H. Batchelor, sales manager.

GULF Oil CORPORATION OF PA. Successor to GULF RE-FINING CO., Pittsburgh, Pa. Division Sales Offices: Atlanta. Ga.—A. W. Ripley, Greenville, S. C.; T. C. Scaffe. Spartanburg, S. C.; J. H. Hooten. Gastonia. N. C.; R. G. Burkhalter, Char-lotte, N. C.; G. P. King, Jr., Augusta, Ga.; Boston. Mass.; New York, N. T.; Philadelphia, Pa.; New Orleans, La.; Houston, Tex.; Louisville, Ky.; Toledo, O.

HART PRODUCTS CORP., 1440 Broadway, New York City. Sou. Reps., Samuel Lehrer. Box 234, Spartanburg, S. C.; Talley W. Piper. P. O. Box 534, Fairfax, Ala.; L. R. Unruh, P. O. Box 1602, Charlotte, N. C.

H & B AMERICAN MACHINE CO., Pawtucket, R. I. Sou. Offices, 816 The Citizens and Southern National Bank Bldg., Atlanta, Ga., J. C. Martin, Agt.; Johnston Bldg., Charlotte, N. C.; J. W. Rimmer. Mgr.; Fritz Zweifel, Fred Dickinson, Jim Miller, sales and service representatives.

HERCULES POWDER CO., Wilmington, Del. Sou. Reps., Chas. H. Stone, Charlotte, N. C.

HERMAS MACHINE Co., Hawthorne, N. J. Sou. Rep., Carolina Specialty Co., P. O. Box 520, Charlotte, N. C.

lina Specialty Co., P. O. Box 520, Charlotte, N. C.

HOUGHTON & CO., E. F., 240 W. Somerset St. Philadelphia.
Pa. Sou. Sales Mgr., W. H. Brinkley, 1410 First National Bank
Bildg., Charlotte, N. C. Sou. Reps., Walter Andrews, 1306 Court
Square Bidg., Baltimore, Md.; C. L. Elgert. 1306 Court Square
Bidg., Baltimore, Md.; C. B. Kinney, 1410 First National Bank
Bidg., Charlotte, N. C.; D. O. Wylle, 1410 First National Bank
Bidg., Charlotte, N. C.; J. J. Rellly, 2855 Peachtree, Apt. No. 45,
Atlanta, Ga.; James A. Brittain, 1526 Sutherland Place, Homewood, Birmingham, Ala.; J. W. Byrnes, 333 St. Charles St., New
Orleans, La.; P. E. Dodd, 333 St. Charles St., New
Orleans, La.; B. E. Dodd, 333 St. Charles St., New Orleans, La.; B.
HOUGHTON WOOL CO., 253 Summer St., Boston, Mass. Sou.
Rep., Jas. E. Taylor, P. O. Box 2084, Charlotte, N. C.
HOWARD BROS, MFG, CO., Worcester, Mass. Sou. Office and
Plant, 244 Forsyth St., S.W., Atlanta, Ga., Guy L. Melchor, Mgr.
Sou. Rep., Guy L. Melchor, Jr., Atlanta Office; S.W. Rep., Russell A. Singleton, Mail Route 5, Dallas, Tex.

JACOBS MFG, CO., E. H. Danielson, Conn. Sou. Rep., W.

sell A. Singleton, Mail Route 5, Dallas, Tex.

JACOBS MFG. CO., E. H. Danielson, Conn. Sou. Rep., W. Irving Bullard, Pres., Charlotte, N. C. Mgr. Sou. Service Dept., S. B. Henderson, Greer, S. C.: Sou. Distributors, Odell Mill Supply Co., Greensboro, N. C.; Textile Mill Supply Co., and Charlotte Supply Co., Charlotte, N. C.; Gastonia Mill Supply Co., Gastonia, N. C.; Shelby Supply Co., Shelby, N. C.; Sullivan Hdw. Co., Anderson, S. C.; Montgomery & Crawford, Spartanburg, S. C.; Industrial Supply Co., Clinton, S. C.; Carolina Supply Co., Greenville, S. C.; Fulton Supply Co., Atlanta, Ga.; Southern Belting Co., Atlanta, Ga.; Greenville Textile Mill Supply Co., Greenville, S. C., and Atlanta, Ga.; Young & Vann Supply Co., Birmingham, Ala.; Waters-Garland Co., Louisville, Ky.

KEEVER STARCH CO., Columbus, O. Sou. Office, 1200 Woodside Bldg., Greenville, S. C.; Daniel H. Wallace, Sou. Agt. Sou. Warehouses, Greenville, S. C., Charlotte, N. C., Burlington, N. C. Sou. Reps., Claude B. Her, P. O. Box 1333, Greenville, S. C.; Luke J. Castile, 515 N. Church St., Charlotte, N. C.; F. M. Wallace, 1115 S. 26th St., Birmingham, Ala.

LAUREL SOAP MFG. CO., Inc., 2607 E. Tioga St., Philadelphia, Pa. Sou. Rep., A. Henry Gaede, P. O. Box 1083, Charlotte, N. C.

LINK-BELT CO., Philadelphia-Chicago, Indianapolis. Sou. Offices: Atlanta Plant, 1116 Murphy Ave., S.W., I. H. Barbee, Mgr.; Baltimore, \$18 Lexington Bidg., H. D. Alexander; Dallas

Warehouse, 413-15 Second Ave., E. C. Wendell, Mgr.; New Orleans, 747 Tchoupitoulas St.

MAGUIRE & CO., JOHN P., 370 Fourth Ave., New York City, Du. Rep., Taylor R. Durham, First Nat'l. Bank Bldg., Charlotte.

Sou. Rep., Taylor R. Durham, First Nat'l. Bank Bldg., Charlotte, N. C.

MANHATTAN RUBBER MFG. DIV. OF RAYBESTOS-MAN. HATTAN, Inc., Passalc, N. J. Sou. Offices and Reps., The Manhattan Rubber Mfg. Div., 1108 N. Fifth Ave., Birmingham, Ala.; Alabama—Anniston, Anniston Hdw. Co.; Birmingham, Crandall Eng. Co. (Special Agent); Birmingham, Long-Lewis Hdw. Co.; Gadsden, Gadsden Hdw. Co.; Huntsville, Noofin Hdw. & Supply Co.; Tuscaloosa, Allen & Jemison Co.; Montgomery, Teague Hdw. Co. Florida—Jacksonville, Cameron & Barkley Co. Georgia—Atlanta, Amer. Machinery Co.; Columbus, A. H. Watson (Special Agent); Macon, Bibb Supply Co.; Savannah, D. DeTreville (Special Agent); Macon, Bibb Supply Co.; Savannah, D. DeTreville (Special Agent), Kentucky—Ashland, Ben Williamson & Co.; Harlan, Kentucky Mine Supply Co.; Louisville, Graft-Pelle Co. North Carolina—Asheville, T. S. Morrison & Co.; Charlotte, Charlotte Supply Co.; Durham, Dillon Supply Co.; Elizabeth City Elizabeth City Iron Works & Supply Co.; Fayetteville, Huske Hdw. House; Goldsboro, Dewey Bros.; High Point, Kester Machinery Co., and Beeson Hdw. Co.; Lenoir, Bernhardt-Seagle Co.; Gastonia, Gastonia Beiting Co.; Raleigh, Dillon Supply Co.; Winston-Salem, Kester Machinery Co. South Carolina—Anderson, Sullivan Hdw. Co.; Charleston, Cameron & Barkley Co.; Clinton, Industrial Supply Co.; Claumbia, Columbia, Columbia, Columbia, Chatlanooga, Chattanooga, Belting & Supply Co.; Johnson City, Summers Hdw. Co.; Knoxville, W. J. Savage Co.; Nashville, Buford Bros., Inc. Salesmen—E. H. Olney, 101 Gertrude St., Alta Vista Apits, Knoxville, Ten.; C. P. Shook, Jr., 1031 N. 30th, St., Birmingham, Ala.; B. C. Nabers, 2519 27th Place S. Pirmingham, Ala.; B. C. Nabers, 2519 27th Place S. Pirmingham, Ala.; R. T. Rutherford, 1818 Harding Place, Charlotte, N. C.

MURRAY LABORATORY, Greenville, S. C.

NATIONAL ANILINE & CHEMICAL CO., 40 Rector St., New York City. Sou, Office and Warehouse, 201 W. First St., Charlotte, N. C.; Julian T. Chase, Res. Mgr., Kenneth Mackenzle, Asst. to Res. Mgr., Sou, Reps., Dyer S. Moss, A. R. Akerstrom, W. L. Barker, C. E. Blakely, Frank L. Feazle, Charlotte Office; James I. White, Amer. Savings Bk. Bldg., Atlanta, Ga.; H. A. Rodgers, 1004 James Bldg., Chattanooga, Tenn.; J. H. Shuford, Harry L. Shinn, 932 Jefferson Standard Life Bldg., Greensboro, N. C.; E. L. Pemberton, 324 Dick St., Fayetteville, N. C.

NATIONAL OIL PRODUCTS CO., Harrison, N. J. Sou. Reps., R. B. MacIntyre, 801 E. Blvd., Charlotte, N. C.; G. H. Small, 799 Argonne Ave., N.E., Atlanta, Ga. Warehouse, Chattanooga, Tenn.

NATIONAL RING TRAVELER CO., 257 W. Exchange St., Providence, R. I. Sou. Office and Warehouse, 131 W. First St., Charlotte, N. C. Sou. Agt., C. D. Taylor, Gaffney, S. C. Sou. Reps., L. E. Taylor, Box 272, Atlanta, Ga.; Otto Pratt, Gaffney, S. C.; H. B. Askew, Box 272, Atlanta, Ga.

N. Y. & N. J. LUBRICANT CO., 292 Madison Ave., New York City. Sou. Office. 601 Kingston Ave., Charlotte, N. C., Lewis W. Thomason, Sou. Dist. Mgr. Sou. Warehouses, Charlotte, N. C., Spartanburg, S. C., Atlanta, Ga., Greenville, S. C.

NORLANDER MACHINE CO., New Bedford, Mass. Son. Plant, 213 W. Long St., Gastonia, N. C.

NORMA-HOFFMANN BEARINGS CORP., Stamford, Conn. Sou. Rep., E. W. Lawrence, 1841 Plaza, Charlotte, N. C.

ONYX OIL & CHEMICAL CO., Jersey City, N. J. Sou. Rep., Edwin W. Klumph, 1716 Garden Terrace, Charlotte, N. C.

PLYMOUTH BOX & PANEL CO. Sales Office, 614 Johnston Bldg., Charlotte, N. C. Sales Staff, E. J. Mueller, C. P. Semmlow. Plant at Plymouth, N. C.

PERKINS & SON, Inc., B. F., Holyoke, Mass.

ROY & SONS, B. S., Worcester, Mass. Sou. Office Blvd., Greenville, S. C. John R. Roy, Representative

SACO-LOWELL SHOPS, 147 Milk St., Boston, Mass. Sou. Office and Repair Depot. Charlotte, N. C., Walter W. Gayle, Sou. Agent; Branch Sou. Offices, Atlanta, Ga., John L. Graves, Mgr.; Greenville, S. C.

SEYDEL CHEMICAL CO., Jersey City, N. J. Sou. Rep., Harold P. Goller, Greenville, S. C.; Francis P. Boyer, Lowell, Mass.

SEYDEL-WOOLLEY CO., 748 Rice St., N.W., Atlanta, Ga.

SHERWIN-WILLIAMS CO., THE, Cleveland, O. Sou. Reps. E. H. Stegar, 212 W. First St., Charlotte, N. C.; R. B. Olney, 153 E. Main St., Spartanburg, S. C.; W. O. Masten, 2308 S. Main St., Winston-Salem, N. C.; J. K. Montague, 230 Bay View Blvd., Portsmouth, Va.; T. R. Moore, 509 Westover Ave., Roanoke, Va.; G. N. Jones, 207 Glassock St., Raleigh, N. C.; John Limbach, 233 Peachtree St., Atlanta, Ga.; D. S. Shimp, 3 Cummins Sta., Nashville, Tenn. Warehouses at Philadelphia, Charlotte, Spartanburg, Atlanta, Columbus, Nashville, Newark and Boston.

SIGNODE STEEL STRAPPING CO., 2600-2620 N. Western Ave., Chicago, Ill. Sou. Warehouses and Offices, Greensboro, N. C., 903 Lakeview St., 'Phone 6935, O. B. Shelton, Rep.; Atlanta, Ga., 113 Courtland St., S. E., A. S. Stephens, Rep.; New Orleans, La., 700 Tchoupitoulas St., P. E. Odenhahl, Rep.

SIPP-EASTWOOD CORP., Paterson, N. J. Sou. Rep., Carolina Specialty Co., Charlotte, N. C.

SLIP-NOT BELTING CORP., Kingsport, Tenn.

SOCONY-VACUUM OIL CO., Inc., Southeastern Div. Office, 1802 Baltimore Trust Bldg., Baltimore, Md. Warehouses: Union Storage Warehouse Co., 1000 W. Morehead St., Charlotte, N. C.; Textile Warehouse Co., 511 Rhett St., Greenville, S. C.; South Atlantic Bonded Warehouse Co., Greensboro, N. C.; New South Express Lines, Columbia, S. C.; Terminal Storage Corp., 217 N. 17th St., Richmond, Va.; Taylor Transfer Co., 103 Boush St., Norfolk, Va.

SOLUOL CORP., 123 Georgia Ave., Providence, R. I. Sou. ep., Eugene J. Adams, P. O. Box 129, Anderson, S. C. SOUTHERN SPINDLE & FLYER CO., Charlotte, N. C.

STALEY MFG. CO., A. E., Decatur, III. Sou. Offices, 1710 Rhodes-Haverty Bldg., Atlanta, Ga., Wm. H. Randolph, Jr. Sou. Mgr. 812 Montgomery Bldg., Spartanburg, S. C., Geo. A. Dean. Reps., W. T. O'Steen, Greenville, S. C.; John A. Harris, Greensboro, N. C.; R. R. Berry, Atlanta, Ga.; H. A. Mitchell, Birming-

boro, N. C.; K. R. Berry, Atlanta, Ga.; H. A. Mitchell, Birming-ham. Ala, STANLEY WORKS. THE, New Britain, Conn. Sou. Office and Warehouse, 552 Murphy Ave., S.W., Atlanta, Ga., H. C. Jones, Mgr.; Sou. Rep., Corry Lynch, P. O. Box 1204, Charlotte, N. C.

STEEL HEDDLE MFG. CO., 2100 W. Allegheny Ave., Philadelphia. Pa. Sou. Office Plant, 621 E. McBee Ave., Greenville. S. C., H. E. Littlejohn and J. J. Kaufman, Jr., Vice-Pres. incharge of reed plant; Atlanta. Ga., H. Raiford Gaffney, 268 McDonough Blvd., Greensboro, N. C., C. W. Cain.

charge of reed plant; Atlanta, Ga., H. Raiford Gamney, 268 McDonough Blvd., Greensboro, N. C., C. W. Cain.

STEIN, HALL & CO., Inc., 285 Madison Ave., New York City.
Sou. Office, Johnston Bidg., Charlotte, N. C., Ira L. Griffin, Mgr.

STERLING RING TRAVELER CO., 101 Lindsey St., Fail
River, Mass. Sou. Rep., Geo. W. Walker, P. O. Box 78. Greenville, S. C.; D. J. Quillen, P. O. Box 443, Spartanburg, S. C.

STEWART IRON WORKS. Cincinnati, O. Sales Reps., Peterson-Stewart Fence Construction Co., 241 Liberty St., Spartanburg, S. C.; Fred C. Shaefer, West Point, Ga.; A. E. Sortore, 27

Dartmouth Ave., Avandale Estates, Ga.; Ruff Hdw. Co., 1849

Main St., Columbia, S. C.; Lewis M. Clyburn, Box 388, Lancaster, S. C.; R. E. Davis, P. O. Box 343, Goldsboro, N. C.; Henry

D. Bunch, 319 S. Boylan Ave., Raleigh, N. C.; Lewis L. Merritt,
Odd Fellows Bidg., Wilmington, N. C.; Edwin C. Bovette, Jr.,
1025 Arosa Ave., Charlotte, N. C.; John G. Webb, Hillsboro, N.

C.; S. Donaldson Fortson, 548 Broad St., Augusta, Ga.; The
Taylor Iron Works & Supply Co., 1014 Broadway, Macon, Ga.;

D. E. Kehne, 412 E. 40th St., Savannah, Ga., Complete sales and
erection service available through all of our representatives.

STONE, CHAS, H., Inc., Stone Bidg., Charlotte, N. C.

TERRELL MACHINE CO., Charlotte, N. C. E. A. Terreil,
Pres and Mgr.

TEXAS CO., THE, New York, N. Y. District Offices, Box 201. Norfolk, Va., and Box 1722, Atlanta, Ga. Bulk plants and warehouses in all principal cities. Lubrication Engineers, H. L. Marlow, W. H. Grose, J. C. Whitehurst, Charlotte, N. C.; P. H. Baker, Spartanburg, S. C.; D. L. Keys, Richmond, Va.

TEXTILE BANKING CO., 55 Madison Ave., New York City. Sou. Ren., Chas. W. Metcalf, 1112 Commercial National Bank Bildg., Charlotte, N. C.

TEXTILE SHOP, THE, Franklin St., Spartanburg, S. C. E. J. Eaddy, Sec. and Treas.

UNIVERSAL WINDING CO., Providence, R. I. Sou. Offices. Charlotte, N. C., Atlanta, Ga.

U S BOBBIN & SHUTTLE CO., Manchester, N. H. Sou. Plants. Greenville. S. C.; Johnson Citv. Tenn., and Monticello. Ga. Sou. Reps., E. Rowell Holt. 1008 Johnston Bldg., Charlotte, N. C.; M. Ouslev. P. O. Box 816, Greenville, S. C.; Chas. Sidney Jordan, Monticello, Ga., and L. K. Jordan, Sales Mgr., Monticello. Ga.

Jordan. Monticello, Ga., and L. K. Jordan, Sales Mgr., Monticello. Ga.

U. S. GUTTA PERCHA PAINT CO., Providence, R. I. Sou. Fac. Reps., J. S. Palmer, 1400-A Woodside Bidg., Greenville, S. C.: L. K. Palmer. P. O. Box 241, Birmingham, Ala.; William M. Moore, 601 Pearl St., Lynchburg, Va. Sou. Distributors Barreled Sunlight. D. A. Hines, 316 Twelfth St., Lynchburg, Va.; The Henry Walke Co., P. O. Box 1003, Norfolk, Va.; Bullington Paint Co., Inc., Fourth and Proads Sts, Richmond, Va.; Morganis, Inc., 111 W. Broad St., Savannah, Ga.; Nelson Hdw. Co., 17 Campbell Ave., E. Roanoke, Va.; Atlantic Paint Co., 207 Meeting St., Charleston, S. C.; Pritchard Paint & Glass Co., 12 W. 5th St., Charlotte, N. C.; Gate City Paint Co., 110 N. Greene St., Greensboro, N. C.; Montsomery & Crawford, Inc., Spartanburg. S. C.; Dobyns-Taylor Hdw. Co., Kingsport, Tenn.; Chapman Drug Co., 516 State St., Knoxville, Tenn.; Binswanger Co., of Tenn., 646–555 Union Ave., Memphis, Tenn.; G. & H. Paint & Glass Co., 1016 Broadway, Columbus, Ga.; The Hutchens Co., 100 S. Jefferson St., Huntsville, Ala.; Campbell Coal Co., 236–240 Marietta St., N.W., Atlanta, Ga.; Favvot Roofing & Supply Co., P. O. Box 116, Station G, New Orleans, Ja.; Standard Bide, Mt. Co., Inc., 230 31st St., Birminsham, Ala.; Shaw Paint & Wallbaper Co., Durham, N. C.; Vick Paint Co., Bluefield, W. Va.; Baldwin Supply Co., Beckley, W. Va.; Robes, Inc., 809 Cherry St., Chattanooga, Tenn.

U. S. RING TRAVELER CO., 159 Aborn St., Providence, R. I. Sou Reps., William W. Vaughan, P. O. Box 792, Greenville, So.

U. S. RING TRAVELER CO., 159 Aborn St., Providence, R. I. Sou. Reps., William W. Vaughan, P. O. Box 792, Greenville, S. C.; Oliver B. Land, P. O. Box 158, Athens, Ga.

VEEDER-ROOT, Inc., Hartford, Conn. Sou. Office. Room 1401 Woodside Bldg., Greenville, S. C., Edwin Howard, Sou. Sales Mgr.

VICTOR RING TRAVELER CO., Providence, R. I., with Sou, office and stock room at 173 W. Franklin Ave., Gastonia, N. C. Also stock room in charge of B. F. Barnes, Jr., Mgr., 1733 Inverness Ave., N.E., Atlanta, Ga.

VISCOSE CO., Johnston Bldg., Charlotte, N. C., Harry L. Dalton, Mgr.

WHITIN MACHINE WORKS, Whitinsville, Mass. Sou Office, Whitin Bldg., Charlotte, N. C., W. H. Porcher and R. I. Dalton. Mgrs.: 1217 Healey Bldg., Atlanta, Ga. Sou, Reps., M. P. Thomas., Charlotte Office; I. D. Wingo and M. J. Bentley, Atlanta

WHITINSVILLE SPINNING RING CO., Whitinsville, Mass. Du. Rep., W. L. Nicholson, 2119 Conniston Place, Charlotte,

WILLIAMS & SONS, I. B., Dover, N. H. Sales Reps., C. C. Withington, 710 Woodside Bidg., Greenville, S. C.; R. A. Brand, 213 Johnston Bidg., Charlotte, N. C. WOLF, JACQUES & CO., Passaic, N. J. Sou. Reps., C. R.

Bruning, 206 S. Chapman St., Greensboro, N. C.; G. W. Searell, Commodore Apts., Asheville, N. C.; Walter A. Wood Supply Co., 4517 Rossville Bivd., Chattanooga, Tenn.

Co., 4517 Rossville Bivd., Chattanooga, Tens.

WYTHEVILLE WOOLEN MILLS, Inc., Wytheville, Va. Sou.

Reps., Charlotte Supply Co., Charlotte, N. C.; Montgomery &
Crawford Co., Inc., Spartanburg, S. C.; Sullivan Hardware Co.,
Anderson, S. C.; Southern Beiting Co., Atlanta, Ga.; Young &
Vann, Birmingham, Ala.; James Supply Co., Chattanooga,
Tenn.; Russell A. Singleton, Jackson, Miss., and Dallas, Tex.;

Proximity Mercantile, Greensboro, N. C.

Texas Textile Mills, Inc., Plan Approved

Dallas, Tex.—Final approval of second amended 77-B reorganization plan for Texas Textile Mills, Inc., cotton fabrics, of this city, with branches elsewhere in Texas, was given by Judge W. H. Atwell in U. S. District Court here.

The plan provides bondholders receive 50 per cent of face value of holdings; Dallas, Fort Worth and Kansas City properties may be sold to get cash for new corporation; \$60,000 for improvement in McKinney plant, and \$40,000 for modernization of Waco plant.

United States have largely dominated the Turkish import trade in cottons during recent months. It is pointed out, however, that American sales may slide downward, due to the fact that United States prices are believed too high and American firms often refuse to comply with local requirements in designs, patterns and texture.

W. P. Jacobs Deplores Rural Conditions

Columbia, S. C.—"The worst social conditions in South Carolina are not to be found in industrial centers but in the farming sections and in backwood areas where work is harder, hours longer, future more insecure and the need for social security greater," declared Dr. W. P. Jacobs, secretary-treasurer of the Cotton Manufacturers' Association of South Carolina, and president of the Presbyterian College at Clinton, S. C., in an address to the members and visitors at the annual luncheon of the Family Welfare Society at the Hotel Columbia. His subject was: "Social Objective."

N. C. Will Use Cotton for Binding **Pavements**

Washington.—Experiments of new uses of cotton in highway construction will be made on a large scale in North Carolina, it was revealed here. The State has submitted one of the largest requests of the 32 States asking materials to carry on the tests.

North Carolina requests 1,115,253 square yards of cotton fabric for use as reinforcement membrane in bituminous surface-treated highways and 2,755 cotton mats for use in curing concrete highways. Estimates indicate that the cotton fabric is to be used in the construction of approximately 575 miles of road in the State.

South Carolina has requested 669,793 square yards of cotton fabric for use as reinforcement membrane in bituminous surface-treated highways and 1,200 cotton mats for use in curing concrete highways.

The project is being financed with funds made available by Section 32 of the amendments to the Agricultural Adjustment Act, approved last August. This section makes available to the Secretary of Agriculture an amount equal to 30 per cent of the customs receipts for uses which include the encouragement of domestic consumption of agricultural commodities by diverting them from normal channels of trade to new uses.

LONGER SERVICE AND FEWER REPAIRS



vocel Number Five Closets, due to their efficient and economical operation, are being installed in mills and factories all over the country. Furthermore, by use of the vocel Number One Valve, this outit can be made semi frost-proof. This permits can be banked over week-ends or for fires to be banked over week-ends or for days at a time without danger of freezing.

Sold by plumbers everywhere

Sold by plumbers everywhere

JOSEPH A. VOGEL COMPANY

Wilmington, Del.

Sr. Louis, Mo.

VOGEL Products



"The Diamond-Finish People made delivery on the dot!"

"We're in urgent need of 1,200 rings," 'phoned a southern mill. "What's the quickest you can make them?" We promised shipment in 10 days. 8 days later 500 had been made and shipped, and the rest went on the exact date promised! Deal with a plant specializing entirely on rings, and you receive two advantages: extra good rings and extra good SERVICE!

WHITINSVILLE (MASS.)

SPINNING
Makers of Spinning and



RING CO.
Twister Rings since 1873

Southern Representative: WALTER L. NICHOLSON, 2L19 Coniston Place, Charlotte Mid-West Representative: ALBERT R. BREEN, 2650 Coyne Street, Chicago

Books That Will Help You With Your Problems

"Clark's Weave Room Calculations"

By W. A. GRAHAM CLARK

Textile Expert of U.S. Tariff Commission

Second edition. Completely revised and enlarged. A practical treatise of cotton yarn and cloth calculations for the weave room. Price, \$3.00.

"Practical Loom Fixing" (Third Edition)

By THOMAS NELSON

Completely revised and enlarged to include chapters on Rayon Weaving and Rayon Looms. Price, \$1.25.

"Carding and Spinning"

By GEO. F. IVEY

A practical book on Carding and Spinning. Price, \$1.00.

"Cotton Mill Processes and Calculations"

By D. A. Tompkins

Third edition. Completely revised. An elementary text book for the use of textile schools and home study. Illustrated throughout. Price, \$2.00.

"Remedies for Dyehouse Troubles"

By WM. C. Dodson, B.E.

A book dealing with just that phase of dyeing which constitutes the day's work of the average mill dyer. Price, \$1.50.

"Cotton Spinner's Companion"

By I. C. NOBLE

A handy and complete reference book. Vest size. Price, 75c.

Published By

Clark Publishing Company Charlotte, N. C.

Butterworth mounces LECTRIC GUIDERS

THESE new Electric Guiders we believe to be in every way equal to our Foxwell Air Guiders which we have made for more than 20 years. They operate directly from any A. C. 110-125 which we have made for more than 20 years. They operate directly from any A. C. 110-125 which we have made for auxiliary equipment.

line without need for auxiliary equipment.

The motor which actuates them is fully enclosed and being stalled for at least 30 hours without fear of the motors are a torque type and will stand being stalled. The motor which actuates them is fully enclosed and has no brushes to spark or require replacing.

These motors are a torque type and will stand being stalled for at least 30 hours without fear of burning out. burning out.

The contact switch operates in a vacuum, these points are always clean. Tests show that this type points of this switch. Being in a vacuum, these points are always clean. The contact switch operates in a vacuum. Very little pressure is required to open and close type points of this switch. Being in a vacuum, these points are always clean. When such of switch will operate millions of times without the need for the slightest adjustment. line without need for auxiliary equipment. points of this switch. Being in a vacuum, these points are always clean. Tests show that this type such of switch will operate millions of times without the need for the slightest adjustment. When such adjustment is required, it can be made in less than a minute.

burning out.

adjustment is required, it can be made in less than a minute.

adjustment is required, it can be made in less than a minute.

A feature of our new electric guiders is the tension or nip control take care of voiles, organdies and feature of our new electric guiders is the adjusted instantly to take care of voiles. The pressure between these rolls can be adjusted instantly to take care of voiles. A feature of our new electric guiders is the tension or nip control between the brass and rubber rolls. The pressure between these rolls can be adjusted instantly to take care of voiles, organdies, duck—any weight and character of goods. duck—any weight and character of goods.

Another feature of the guider is an arrangement which permits the rolls to be parted while seams are passing through them. duck—any weight and character of goods.

seams are passing through them.

Seams already equipped with Foxwell air guiders can change over to our new electric guiders already equipped with Foxwell either ship you complete new guider heads and make with no loss of production time. We will either ship you complete new guider heads and make with no loss of production time. Plants already equipped with Foxwell air guiders can change over to our new electric guiders make with no loss of production time. We will either ship you complete new guider takes the place an allowance for your present heads or we can ship the conversion unit which takes the place. with no loss of production time. We will either ship you complete new guider heads and make an allowance for your present heads or we can ship the conversion unit which takes required of the present air mechanism. These you can install yourself—four holes only are an allowance for your present heads or we can ship the conversion unit which takes the place of the present air mechanism. These you can install yourself—four holes only are required to be drilled. to be drilled.

Folders and any additional information requested about our new Electric Guiders will be sent promptly.

PROVIDENCE, R. I. CHARLOTTE, N. C. W. J. WESTAWAY AND CO., TORONTO, ONTARIO be sent promptly.

They lay selvedge on selvedge.

COMPLETE LINE OF FINISHING AND RAYON MACHINERY FOR THE TEXTILE INDUSTRY

ON CHAPEL HILL FLY XUB UNIVERSITY OF N C 8 D 151. IN SOCIAL SERVICE INSTITUTE FOR RESEARCH OCT